

CURRICULUM VITAE

Biographical Data:

Name and Surname: Radu-Emil Precup.
Day and place of birth: March 22, 1963, Lugoj, Romania.
Civil status: Married with Adriana-Carmen.

Education (<http://www.aut.upt.ro/~rprecup/bio.html>):

- ❑ 1992-1996: Ph.D. in Automatic Systems, “Politehnica” University of Timisoara, Romania, Faculty of Automation and Computers (supervisor: Prof.Dr.-Ing. Stefan Preitl, thesis entitled “Contributions Concerning Fuzzy Control of Non-minimum Phase Systems with Applications to Hydro-generators Control”).
- ❑ 1988-1993: graduated The Faculty of Mathematics, West University of Timisoara, Romania, Mathematics area of specialization, final grade after five years of study of 9.05 and license grade of 10 on the 1-10 scale with 1 the minimum and 10 the maximum.
- ❑ 1982-1987: Dipl.-Ing. Degree, graduated with honours The Faculty of Electrical Engineering, “Traian Vuia” Polytechnical Institute of Timisoara, Romania, Automation and Computers area of specialization, Computerized Process Control stream, final grade after five years of study of 9.98 and diploma grade of 10 on the 1-10 scale.
- ❑ 1977-1981: Baccalaureate in Mathematics-Physics, Industrial no. 1 High School, Lugoj, Romania.

Working Experience (<http://www.aut.upt.ro/~rprecup/bio.html>):

- ❑ 2016 – 2022: Adjunct Professor within the School of Engineering, Edith Cowan University, Joondalup, WA, Australia (<http://www.ecu.edu.au/schools/engineering/staff/>).
- ❑ 2016 – 2020: Dean of the Faculty of Automation and Computers, Politehnica University of Timisoara, Romania (<http://www.ac.upt.ro/conducere.php#top>).
- ❑ 2016 – 2020: Member of the Council of the Doctoral School Automatic Control and Computers, Politehnica University of Bucharest, Romania (<http://doctorat.acs.pub.ro/en/membership-organization/meetings-and-elections/>).
- ❑ 2017 – 2020: Member of the National Research Council (CNCS), Bucharest, Romania (<http://www.research.gov.ro/uploads/sistemul-de-cercetare/organisme-consultative/om-nr213-19-04-2017-cnsc-mo287.pdf>, <http://www.research.gov.ro/uploads/sistemul-de-cercetare/organisme-consultative/om-nr213-19-04-2017-cnsc.pdf>).
- ❑ January – April 2017: Member of the Engineering Sciences Committee of CNCS.
- ❑ January – April 2017: Member of the Committee 2: Information and communication technology, space and security as part of the National Advisory Board for Research, Development and Innovation (CCCDI), Bucharest, Romania.
- ❑ 2012 – 2016: Vice-Dean of the Faculty of Automation and Computers, Politehnica University of Timisoara (previously named, till 2013, “Politehnica” University of Timisoara), Romania.
- ❑ March – June 2012: President of the Research Committee of the University Senate of the “Politehnica” University of Timisoara, Romania.
- ❑ 2011 – 2012: Vice-president of the Computers, information technology and systems engineering committee as part of the National Council for the Approval of Academic Titles, Diplomas and Certificates (CNATDCU), Bucharest, Romania, and member of the P2. Engineering sciences panel (<http://www.cnatdcu.ro/paneluri-cnatdcu/panel-2-stiinte-ingineresti/comisia-de-inginerie-calculatoare-tehnologia-informatiei-si-ingineria-sistemelor/>).
- ❑ 2012 – ...: Member of the Computers, information technology and systems engineering committee as part of the CNATDCU (<http://www.cnatdcu.ro/paneluri-cnatdcu/incepand-cu-data-de-7-septembrie-2012/stiinte-ingineresti/comisia-de-calculatoare-tehnologia-informatiei-si-ingineria-sistemelor/>).
- ❑ 2011 – ...: Director of the Automatic Systems Engineering Research Centre with the Politehnica University of Timisoara, Romania (<http://www.aut.upt.ro/centru-cercetare/index.EN.php>).
- ❑ 2009 – ...: Member of the Doctoral School of Applied Informatics and Applied Mathematics with the Óbuda University (previously named Budapest Tech Polytechnical Institution), Budapest, Hungary, as Doctoral Supervisor (http://www.doktori.hu/index.php?menuid=192&sz_ID=8670&lang=EN).
- ❑ 2008 – 2012: Head of the Students Information and Counselling Office (OICS) with the Faculty of Automation and Computers, “Politehnica” University of Timisoara, Romania.
- ❑ 2004 – ...: Doctoral Supervisor of Automation and Systems Engineering, Politehnica University of Timisoara, Romania (<http://www.aut.upt.ro/~rprecup/stud.html>).

Five graduated doctoral students: Raul-Cristian Roman (March 2018), thesis title: “Model-free techniques for controller tuning” (in Romanian: “Tehnici de tip model-free de acordare a parametrilor reguletoarelor automate”), Radu-Codruț David (April 2015), thesis title: “Contributions to modeling and optimization of fuzzy control systems”, Mircea-Bogdan Rădac (September 2011), thesis title: “Iterative Techniques for Controller Tuning”, Ovidiu Baniias (May 2009), thesis title: “Contributions to urban road traffic control using a wireless sensor network as traffic detector” (in Romanian: Contributii la conducerea traficului rutier urban utilizand o retea de senzori wireless ca detector de trafic), and Zsuzsa Preitl (April 2008), thesis title: “Model Based Design Methods for Speed Control Applications”.

15 doctoral students currently supervised: Adrian Sebastian Paul (since 2006) approaching the subject “Contributions to automatic control problems in digital audio signal processing”, Lavinia Elena Dragomir (since 2008) approaching the subject “Methods and instruments for automated information extraction”, Lucian-Ovidiu Fedorovici (since 2010) approaching the subject “Printed character recognition solutions”, Constantin Purcaru (since 2011) approaching the subject “Collaborative algorithms for mobile robot control”, Emil-Ioan Voișan (since 2012) approaching the subject “Algorithms for behavioral control of robots”, Ion-Cornel Mitulețu (since 2014) approaching the subject “Control solutions for shape memory alloys”, Teodor-Adrian Teban (since 2015) approaching the subject “Modeling and control solutions for an artificial hand”, Ioan-Daniel Borlea (since 2015) approaching the subject “Big Data information processing algorithms”, Marian-Dan Rarinca (since 2016) approaching the subject “Signal processing algorithms applied to automation”, Elena-Lorena Hedrea (since 2017) approaching the subject “Control techniques based on tensor product model transformation”, Alexandra-Bianca Borlea (since 2017) approaching the subject “Evolving systems applied to automation”, Elena-Cristina Luncă (since 2017) approaching the subject “Systems modeling and control solutions based on type-2 fuzzy sets”, Iuliu Alexandru Zamfirache (since 2018) approaching the subject “Machine learning techniques applied to automation”, Ion Panfilii (since 2019) approaching the subject “Information processing algorithms specific to evolving systems applied to automation”, and Alexandru Nicolae Drăguș (since 2019) approaching the subject “Image processing algorithms applied to automation”.

- ❑ 2018 – ...: Mentoring two postdoctoral researchers: Alexandru Topîrceanu, Politehnica University of Timisoara (UPT), approaching the subject “IMproving the PREdiction of opinion dynamics in temporal Social networks: Mathematical modeling and Simulation framework (IMPRESS)”, financed by UEFISCDI in the project PN-III-P1-1.1-PD-2016-0193, Alexandra-Iulia Szedlak-Stînean, UPT, approaching the subject “NONlinear OBServers-based control structures applied to MEChatronics Systems (NOBSMECS)”, financed by UEFISCDI in the project PN-III-P1-1.1-PD-2016-0331 (<http://www.aut.upt.ro/~rprecup/postdoc.html>).
- ❑ 2001 – 2011: Deputy Director of the Research Centre in Automation and Computers with the “Politehnica” University of Timisoara, Romania, and Director of the Automation and Applied Informatics Division.
- ❑ 2000 – ...: Professor with the Department of Automation and Applied (previously named Industrial) Informatics, Faculty of Automation and Computers, Politehnica University of Timisoara, Romania.
- ❑ 1998 – 2000: Associate Professor with the Department of Automation and Industrial Informatics, Faculty of Automation and Computers, “Politehnica” University of Timisoara, Romania.
- ❑ 1994 – 1998: Lecturer with the Department of Automation and Industrial Informatics, Faculty of Automation and Computers, “Politehnica” University of Timisoara, Romania.
- ❑ 1991 – 1994: Assistant Professor with the Department of Automation and Industrial Informatics, Faculty of Automation and Computers, Technical University of Timisoara, Romania.
- ❑ 1987-1991: Automation engineer with the Timisoara Branch of Infoservice S.A. (previously named SIRECA) Bucharest, Romania, with professional preoccupations in the field of analog and digital control systems.

Other Management and Administration Experience (<http://www.aut.upt.ro/~rprecup/bio.html>):

- ❑ 2019 – ...: Reviewer of the National Council of Science and Technology (CONACYT), Ciudad de Mexico, Mexico.

- ❑ 2019 – ...: Reviewer of the Mobility and Reintegration Programme (MoRePro) of the Slovak Academy of Sciences, Bratislava, Slovakia.
- ❑ 2019 – ...: Reviewer of the Science Fund of the Republic of Serbia, Belgrade, Serbia.
- ❑ 2017 – ...: Reviewer of the Slovenian Research Agency (ARRS), Ljubljana, Slovenia.
- ❑ 2014 – ...: Member of the Informatics and Electrical Engineering review panel of the Hungarian National Research, Development and Innovation Office (NKFIH), with the previous name Hungarian Scientific Research Fund (OTKA), Budapest, Hungary.
- ❑ 2012 – ...: Reviewer of the Research Foundation - Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO), Brussels, Belgium.
- ❑ 2011 – ...: Reviewer of the Member of the Informatics and Electrical Engineering review panel of the Hungarian National Research, Development and Innovation Office (NKFIH), with the previous name Hungarian Scientific Research Fund (OTKA), Budapest, Hungary, Budapest, Hungary.
- ❑ 2011 – ...: Reviewer of the Czech Science Foundation (GACR), Prague, Czech Republic.
- ❑ March – June 2012: Member of the University Senate of the “Politehnica” University of Timisoara, Romania.
- ❑ 2000 – ...: Member of the Faculty Council of the Faculty of Automation and Computers, Politehnica University of Timisoara, Romania.
- ❑ 2008 – 2012 and 2000-2004: Member of the Department Council of the Department of Automation and Industrial Informatics, Faculty of Automation and Computers, “Politehnica” University of Timisoara, Romania.
- ❑ 2000 – ...: Expert and evaluator of the National Research Council (with the abbreviation CNCS, the previous name National University Research Council and the previous abbreviation CNCSIS), Bucharest, Romania, in the fields of Automation, Robotics and Systems Engineering.
- ❑ 2007 – ...: Expert and evaluator of the Romanian Agency for Quality Assurance in Higher Education (with the abbreviation ARACIS), Bucharest, Romania, in the field of Systems Engineering.
- ❑ 2008 – 2009: Coordination of the accreditation activity of the Master program in Automotive Embedded Software within the Faculty of Automation and Computers, “Politehnica” University of Timisoara, Romania.
- ❑ 2008 – 2009: Coordination of the research part of the accreditation activity of the Bachelor program in Systems Engineering and of the Master programs in Automatic Systems Engineering, and Informatics Systems Applied to Manufacturing and Services, within the Faculty of Automation and Computers, “Politehnica” University of Timisoara, Romania.

The Address of the researcherid.com Profile:

- <http://www.researcherid.com/rid/A-6993-2009>.

The Address of the Open Researcher & Contributor ID (ORCID):

- <https://orcid.org/0000-0002-2060-7403>.

Fields of Scientific Interest (<http://www.aut.upt.ro/~rprecup/research.html>):

- Development and analysis of new control structures and algorithms including conventional control, fuzzy control, data-based control, model-free control, sliding mode control, neuro-fuzzy control, etc.
- Theory and applications of soft computing.
- Systems modelling, identification and optimization (including nature-inspired algorithms).
- Computer-aided design of control systems.
- Applications to mechatronic systems (including automotive systems and mobile robots), embedded systems, control of power plants, servo systems, electrical driving systems, etc.

Previous Research Areas (<http://www.aut.upt.ro/~rprecup/research.html>):

- Development of methods for the algorithmic design of linear control systems: state feedback, controllers for time delay systems with and without integral component, optimization techniques (since 1993).
- Development of advanced / intelligent control structures and algorithms: sliding mode control, fuzzy control, neuro-fuzzy control (since 1992).
- Modernizing the speed controllers for hydro-generators (since 1991).
- Development of control structures and algorithms dedicated to electrical and electro-hydraulic servo-systems and drives (since 1995).

Scientific Publications (please see the attached Publication List and also <http://www.aut.upt.ro/~rprecup/public.html>):

- Co-author of one book published in **Butterworth-Heinemann, Elsevier** (Oxford, UK, 2019) (<https://www.elsevier.com/books/nature-inspired-optimization-algorithms-for-fuzzy-controlled-servo-systems/precup/978-0-12-816358-0>, <https://www.sciencedirect.com/book/9780128163580/nature-inspired-optimization-algorithms-for-fuzzy-controlled-servo-systems>), one book published in Editura Tehnica Publishers (Bucharest, 1997), author / co-author of ten books in Editura Orizonturi Universitare Publishers (Timisoara, 1999-2009) and three books in Editura Politehnica Publishers (Timisoara, 2001-2012) (<http://www.aut.upt.ro/~rprecup/books.html>).
 - Editor of three books published in **Springer** (2012, 2019) (<https://www.springer.com/gp/book/9783642283048>, <https://www.springer.com/gp/book/9789811359941>, <https://www.springer.com/gp/book/9789811361500>).
 - Co-author of 25 book chapters published in Springer-Verlag, Kluwer Academic Publishers, IET Digital Library, World Scientific and Atlantis Press (<http://www.aut.upt.ro/~rprecup/bookch.html>).
 - Co-author of 84 papers published in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge) journals (<http://www.aut.upt.ro/~rprecup/isijournals.html>): Automatica, IEEE Transactions on Cybernetics, IEEE Transactions on Neural Networks, IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Industrial Electronics, IEEE/ASME Transactions on Mechatronics, Information Sciences, IEEE Transactions on Industrial Informatics, Expert Systems with Applications, Fuzzy Sets and Systems, ISA Transactions, Computers in Industry, Engineering Applications of Artificial Intelligence, Applied Soft Computing, Journal of The Franklin Institute, Robotics and Autonomous Systems, Asian Journal of Control, Mathematics and Computers in Simulation, Knowledge-Based Systems, IEEE Transactions on Education, IEEE Systems Journal, International Journal of Systems Science, International Journal of General Systems, Acta Astronautica, IET Control Theory & Applications, Neurocomputing, Electrical Engineering, Journal of Aerospace Information Systems, etc., in Elsevier Science, Springer-Verlag, John Wiley and Sons, Taylor & Francis, The American Institute of Aeronautics and Astronautics, etc.
 - **Four Highly Cited Papers according to Clarivate Analytics Web of Science** as of September/October 2019, May/June 2018 and November/December 2015 (http://www.aut.upt.ro/~rprecup/CiI_2011_Highly_Cited_Paper.png, http://www.aut.upt.ro/~rprecup/TIE_2017_Highly_Cited_Paper.png, http://www.aut.upt.ro/~rprecup/InfSci_2017_Highly_Cited_Paper.jpg, http://www.aut.upt.ro/~rprecup/KBS_2013_Highly_Cited_Paper.jpg).
 - **One Hot Paper according to Clarivate Analytics Web of Science** as of November/December 2015 (http://www.aut.upt.ro/~rprecup/CiI_2015_Hot_Paper.jpg).
 - Co-author of 46 papers published in refereed journals / contributions to books (<http://www.aut.upt.ro/~rprecup/journals.html>).
 - Author / co-author of more than 150 papers published in refereed academic conferences (IEEE, IFAC, IFSA, EUFIT, ECC and others) organized in Austria, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Italy, Malta, Poland, Portugal, Russia, Serbia, Slovak Republic, Slovenia, South Africa, Spain, Switzerland, Tunisia, Turkey, UK, USA, Zambia (<http://www.aut.upt.ro/~rprecup/confe.html>).
 - Author / co-author of more than 50 papers published in refereed academic conferences organized in Romania.
 - **Cumulative Clarivate Analytics Web of Science (formerly ISI Web of Knowledge) impact factor (IF) = 152.651, cumulative IF according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 278.852** (<http://www.aut.upt.ro/~rprecup/isijournals.html>, the IF of leader journals in my field is around 3).
 - **My Erdős number is 3.**
 - Editor, Proceedings of 7th and 8th International Conferences on Technical Informatics CONTI'2006 and CONTI'2008, Timisoara, Romania, Editura Politehnica, Timisoara, 2006 and 2008.
- Invited Papers and Talks** (<http://www.aut.upt.ro/~rprecup/invite.html>):
- R.-E. Precup, Evolving Fuzzy Models of Mechatronics Applications, 17th IEEE International Symposium on Intelligent Systems and Informatics SISY 2019, Subotica, Serbia, pp. 1-2, 2019.
 - R.-E. Precup, T.-A. Teban and A. Albu, Evolving Fuzzy and Neural Network Models of Finger Dynamics for Prosthetic Hand Myoelectric-based Control, Proceedings of 11th International

Conference on Electronics, Computers and Artificial Intelligence ECAI 2019, Pitesti, Romania, pp. 1-8, 2019.

- A. Albu, R.-E. Precup and T.-A. Teban, Medical Applications of Artificial Neural Networks, Proceedings of XIV International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2018, Niš, Serbia, pp. 1-11, 2018.
- R.-E. Precup, St. Preitl, C.-A. Bojan-Dragoş, M.-B. Rădac, A.-I. Szedlak-Stînean, E.-L. Hedrea and R.-C. Roman, Technical and Non-Technical Applications of Evolving Takagi-Sugeno-Kang Fuzzy Models, Proceedings of 4th International Conference on Electrical, Electronic and Computing Engineering IcETRAN 2017, Kladovo, Serbia, pp. 1-8, 2017.
- R.-E. Precup, St. Preitl, C.-A. Bojan-Dragoş, M.-B. Rădac, A.-I. Szedlak-Stînean, E.-L. Hedrea and R.-C. Roman, Evolving Takagi-Sugeno Fuzzy Modeling Applications of Incremental Online Identification Algorithms, Proceedings of XIII International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2016, Niš, Serbia, pp. 3-10, 2016.
- R.-E. Precup, Nature-inspired optimization algorithms applied to fuzzy control, fuzzy modeling, mobile robots and optical character recognition, Proceedings of IEEE 9th International Symposium on Applied Computational Intelligence and Informatics SACI 2014, Timisoara, Romania, pp. 11, 2014.
- St. Preitl and R.-E. Precup, Linear and Fuzzy Control Extensions of the Symmetrical Optimum Method, Proceedings of Special International Conference on Complex Systems: Synergy of Control, Communications and Computing COSY 2011, Ohrid, Republic of Macedonia, pp. 59-68, 2011.
- St. Preitl, R.-E. Precup and Zs. Preitl, Aspects Concerning the Tuning of 2-DOF Fuzzy Controllers, Proceedings of Xth Triennial International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2010, Eds. Nikolić, V., Antić, D. and Mitić, D., Niš, Serbia, pp. 210-219, 2010.
- C.-A. Dragoş, R.-E. Precup, St. Preitl and M.-B. Rădac, Low-cost Fuzzy Control Solutions for Electromechanical Applications, Proceedings of 2nd International Scientific and Expert Conference TEAM 2010, Kecskemét, Hungary, vol. 1, pp. 10-23, 2010.
- St. Preitl, R.-E. Precup and Zs. Preitl, Development of 1-DOF and 2-DOF fuzzy controllers. Applications on servo-systems, Tutorial invited and given at 2004 IEEE-TTC International Conference on Automation, Quality and Testing, Robotics AQTR 2004 (THETA 14), Cluj-Napoca, Romania, 2004.
- St. Preitl, Zs. Preitl and R.-E. Precup, Tuning Methodologies for PI and PID Controllers for Second and Third Order Systems, Proceedings of 7th Conference on Systems, Automatic Control and Measurements SAUM'01, Ed. Nedić, N.N., Vrnjačka Banja, Serbia, pp. 24-29, 2001.
- St. Preitl and R.-E. Precup, Tuning of PI and PID Controllers by a Generalized Form of the Symmetrical Optimum Method, Proceedings of 6th Conference on Systems, Automatic Control and Measurements SAUM'98, Ed. Bucevac, Z., Niš, Serbia, pp. 34-48, 1998.

Research Contracts and Grants (<http://www.aut.upt.ro/~rprecup/contracts.html>):

- 45 national research contracts and grants in the field of automatic control, director to seven of them, director of the Politehnica University of Timisoara partner to four of them.
- One international research contract (director) in 2008-2009 with University of Ljubljana (Slovenia).
- Three international research contracts (principal investigator) in 2003-2009: one with Budapest University of Technology and Economics (Hungary) and two with Budapest Tech Polytechnical Institution.
- Four research industrial contracts in the field of automatic control with a Romanian company.
- Consulting for Romanian and American companies in systems modelling, optimization and automatic control.

Courses Taught (<http://www.aut.upt.ro/~rprecup/teach.html>):

- 2008 – ...: System Theory and Automatization (in English, lectures, B.Sc. program in Computers and Information Technology), Optimization Techniques (lectures, B.Sc. program in Automation and Applied Informatics), Control Engineering (lectures + laboratories, B.Sc. program in Automation and Applied Informatics), Computer Assisted Mathematics (lectures, B.Sc. program in Automation and Applied Informatics), Process Control Structures and Algorithms (laboratories + projects, B.Sc. program in Automation and Applied Informatics), Fuzzy Control Systems (lectures + laboratories + projects, B.Sc. program in Automation and Applied Informatics), Intelligent Control Systems (lectures + laboratories + projects, M.Sc. program in program in Automatic Systems Engineering),

Dynamic Systems and Stability in Automotive Control (in English, lectures + laboratories + projects, M.Sc. program in Automotive Embedded Software), Mathematical Signal Processing (lectures + laboratories, M.Sc. program in Informatics Systems Applied to Manufacturing and Services), Dynamic Systems and Stability (lectures + laboratories + projects, M.Sc. program in Mathematical Algorithms in Engineering), Multi-agent Systems (in English, lectures + projects, M.Sc. program in Automotive Embedded Software).

- ❑ **2000 – 2008:** Advanced Control Systems (lectures + laboratories + projects, Dipl.Ing. program in Automation and Applied Informatics), Advanced Control Strategies (lectures + laboratories, Dipl.Ing. program in Automation and Applied Informatics), Control Engineering (lectures + laboratories + projects, Dipl.Ing. program in Automation and Applied Informatics), Fuzzy Control Systems (lectures + laboratories + projects, Dipl.Ing. program in Automation and Applied Informatics), Computer Assisted Mathematics (lectures, Dipl.Ing. programs in Automation and Applied Informatics, and Computers), Computer-Aided Optimization (lectures + laboratories, Dipl.Ing. program in Automation and Applied Informatics), Modern Approaches to Process Control I (lectures + projects, M.Sc. program in Automatic Systems), Elements of Automatic Control (lectures, Dipl.Ing. program in Power Systems), Intelligent Control in Automotive Embedded Systems (in English, lectures + laboratories + projects, M.Sc. program in Automotive Embedded Software), Multi-agent Systems (in Romanian and English, lectures + laboratories + projects, M.Sc. programs in Automatic Systems, and Automotive Embedded Software), Process Control Structures and Algorithms (laboratories, Dipl.Ing. program in Automation and Applied Informatics).
- ❑ **1998 – 2000:** Advanced Control Systems (lectures + laboratories, Dipl.Ing. program in Automation and Technical Informatics), Control Engineering (laboratories, Dipl.Ing. program in Automation and Technical Informatics), Computer Assisted Mathematics (lectures, Dipl.Ing. programs in Automation and Technical Informatics, and Computers), Optimization Techniques (lectures + laboratories, Dipl.Ing. program in Automation and Technical Informatics), Modern Control Techniques (projects, M.Sc. program in Modern Approaches to Informational Control), Intelligent Control Systems (lectures + projects, M.Sc. program in Automatic Systems), Elements of Automatic Control (lectures, Dipl.Ing. program in Power Systems), System Theory and Automation (lectures, Dipl.Ing. program in Mechanical Engineering), Speed and Voltage Control Systems of Synchronous Generators (lectures + laboratories, M.Sc. program in Stability Analysis of Power Systems).
- ❑ **1994 – 1998:** Advanced Control Systems (lectures + laboratories, Dipl.Ing. program in Automation and Technical Informatics), Control Engineering (laboratories, Dipl.Ing. program in Automation and Technical Informatics), Optimization Techniques (lectures + laboratories, Dipl.Ing. program in Automation and Technical Informatics), Modern Control Techniques (projects, M.Sc. program in Modern Approaches to Informational Control), Elements of Automatic Control (lectures, Dipl.Ing. program in Power Systems), System Theory and Automation (lectures, Dipl.Ing. program in Mechanical Engineering).
- ❑ **1991 – 1994:** Control Engineering (laboratories, Dipl.Ing. program in Automation and Technical Informatics), System Theory (laboratories, Dipl.Ing. programs in Automation and Technical Informatics, and Computers), Elements of Automatic Control (laboratories, Dipl.Ing. program in Power Systems).

Courses Taught and Offered to M.Sc. and Ph.D. Students
(<http://www.aut.upi.ro/~rprecup/phdcourses.html>):

- ❑ Modern Approaches to Process Control I (lectures + projects): M.Sc. program in Automatic Systems + 3 Ph.D. students in 2007-2008 + 3 Ph.D. students in 2008-2008.
- ❑ Intelligent Control in Automotive Embedded Systems (in English, lectures + laboratories + projects): M.Sc. program in Automotive Embedded Software + 2 Ph.D. Students in 2007-2008 + 3 Ph.D. students in 2008-2009.
- ❑ Multi-agent Systems (lectures + projects): M.Sc. program in Automotive Embedded Software (in English) + M.Sc. program in Automatic Systems (in Romanian) + 2 Ph.D. Students in 2007-2008 + 2 Ph.D. students in 2008-2009 + 1 Ph.D. student in 2010-2011 + 1 Ph.D. student in 2010-2011 + 1 Ph.D. student in 2011-2012 + 1 Ph.D. student in 2012-2013.
- ❑ Dynamic Systems and Stability in Automotive Control (in English, lectures + laboratories + projects): M.Sc. program in Automotive Embedded Software + 2 Ph.D. students in 2009-2010 + 3 Ph.D. students in 2010-2011 + 1 Ph.D. student in 2011-2012 + 1 Ph.D. student in 2012-2013.

- ❑ Intelligent Control Systems (lectures + laboratories + projects): M.Sc. program in program in Automatic Systems Engineering + 2 Ph.D. students in 2009-2010 + 3 Ph.D. students in 2010-2011 + 2 Ph.D. students in 2011-2012 + 1 Ph.D. student in 2012-2013.
- ❑ Mathematical Signal Processing (lectures + laboratories): M.Sc. program in Informatics Systems Applied to Manufacturing and Services) + 1 Ph.D. student in 2010-2011 + 1 Ph.D. student in 2011-2012 + 1 Ph.D. student in 2012-2013.

Supervision of Diploma, M.Sc. and B.Sc. Theses (<http://www.aut.upt.ro/~rprecup/theses.html>):

- More than 150 students have defended their diploma, M.Sc. and B.Sc. theses under my supervision at the Faculty of Automation and Computers, Politehnica University of Timisoara, Romania, since 1991.

Pedagogical Publications:

- R.-E. Precup, St. Preitl, M.-B. Rădac, E. M. Petriu, C.-A. Dragoş and J. K. Tar, Experiment-based teaching in advanced control engineering, **IEEE Transactions on Education**, vol. 54, no. 3, pp. 345-355, 2011, impact factor (IF) = 1.021, IF according to 2013 Journal Citation Reports (JCR) released by Clarivate Analytics in 2014 = 1.221.
- C.-A. Dragoş, St. Preitl, R.-E. Precup and E. M. Petriu, Points of View on Magnetic Levitation System Laboratory-Based Control Education, in: Human-Computer Systems Interaction: Backgrounds and Applications 2, Part 2, Z. S. Hippe, J. L. Kulikowski and T. Mroczek, Eds., Advances in Intelligent and Soft Computing, vol. 99 (Springer-Verlag), pp. 261-275, 2012.
- C.-A. Dragoş, St. Preitl, R.-E. Precup and E. M. Petriu, Magnetic Levitation System Laboratory-based Education in Control Engineering, Proceedings of 3rd International Conference on Human System Interaction HSI 2010, Rzeszow, Poland, pp. 496-501, 2010.
- St. Preitl, R.-E. Precup, Gy. Kártyás and J. Gáti, Model Based Concept for Higher Education on the Way Towards Highly Integrated Solutions in Computer Systems, Proceedings of 12th International Conference on Intelligent Engineering Systems INES 2008, Miami, FL, USA, pp. 99-102, 2008.
- St. Preitl, R.-E. Precup and Zs. Preitl, Case Studies in Teaching Fuzzy and Advanced Control Strategies, Proceedings of 8th International Symposium of Hungarian Researchers on Computational Intelligence and Informatics CINTI 2007, Budapest, Hungary, pp. 457-473, 2007.
- St. Preitl and R.-E. Precup, Elements of Methodics of Teaching Courses of Automation and Computer Science (in Romanian: Elemente de metodica predării disciplinelor de automatica și calculatoare), Editura Orizonturi Universitare Publishers, Timisoara, 144 pp., 1999.
- Co-author of four course manuals, of two problem collections and of four laboratory manuals.

Socrates-Erasmus Programs (<http://www.aut.upt.ro/~rprecup/bio.html>):

- Co-ordinator of an Erasmus+ program, 2014-2021, with University of Ljubljana, Slovenia.
- Co-ordinator of an Erasmus-Socrates program, 2009-2013, with University of Ljubljana, Slovenia.
- Co-ordinator of an Erasmus-Socrates program, 2010-2013, with Kecskemét College, Hungary.
- Co-ordinator of an Erasmus-Socrates program, 1999-2000, with Vienna University of Technology, Austria.

Honours (<http://www.aut.upt.ro/~rprecup/honours.html>):

- **Corresponding Member of The Romanian Academy** (since 2018).
- **Corresponding Member of The Academy of Technical Sciences of Romania** (since 2018).
- **Recipient of the Elsevier Scopus Award for Excellence in Global Contribution** (2017).
- **Recipient of the “Grigore Moisil” Prize from the Romanian Academy** for contributions to the optimization of fuzzy systems (2016).
- **Recipient of the “Grigore Moisil” Prize from the Romanian Academy** for contributions to fuzzy control (2005).
- **Recipient of the Spiru Haret Award from the National Grand Lodge of Romania in partnership with the Romanian Academy** for education, environment and IT (2016).
- **Listed as one of the top 10 researchers in Artificial Intelligence and Automation** (according to IIoT World as of July 2017).
- **Listed in the Guide2Research Ranking for Top Scientists in Computer Science and Electronics as 2009th in the World Ranking and 1st in the National Ranking (Romania)** (according to <http://www.guide2research.com/u/radu-emil-precup> as of February 22, 2019).
- **Recipient of the Big Award at 8th Edition of LugoJ Awards Gala** (2018).

- Recipient of the **Certificate of Outstanding Reviewer from IEEE Transactions on Cybernetics** in recognition of an outstanding contribution to the journal (2017).
- **Honorary Professor of Óbuda University (previously named Budapest Tech Polytechnical Institution), Budapest, Hungary** (since 2007).
- **Bologna Professor** (2017) from the National Alliance of Student Organizations in Romania (ANOSR).
- **Senior Member, IEEE** (since 2007).
- Recipient of the **Certificate of Appreciation** from the IEEE Romania Section in grateful recognition of 10 years of service as an IEEE member (2015).
- Recipient of the **Research Excellency Award in 2015** from the Politehnica University of Timisoara (UPT) for the advanced research activity in the field Controllers, Control, Tuning, placed first all over the world in the Scopus ranking and for the exquisite contribution to the international visibility of UPT.
- **Recipient of the Traian Vuia Award for Engineering Sciences at the Excellency Gala in the Banat Region, Second Edition, 2015.**
- **Best Paper Award** at 7th International Conference on Information Technology and Quantitative Management ITQM 2019 (Granada, Spain).
- **Best Paper Nomination** at 12th International Conference on Informatics in Control, Automation and Robotics ICINCO 2015 (Colmar, France).
- **Certificate of Appreciation for the Best Paper in the Session TT07 1 Control Theory** at 39th Annual Conference of the IEEE Industrial Electronics Society IECON 2013 (Vienna, Austria).
- **Best Paper Award** at 16th Online World Conference on Soft Computing in Industrial Applications WSC16 (Loughborough University, UK, 2011).
- Recipient of the **Certificate of Achievement** from the IEEE Romania Section for notable services and contributions towards the advancement of the engineering professions (2011).
- **Two Best Paper Awards in the Area of Intelligent Control Area** at the 2008 Conference on Human System Interaction HSI 2008, Krakow (Poland).
- Recipient of the Excellency Diploma of the Faculty of Automation and Computers for special merits in the research expressed by publications (Timisoara, 2006).
- **Honorary member of Hungarian Fuzzy Association** (HFA, MFT, Budapest, since 2005).
- Recipient of the Diploma of the Faculty of Automation and Computers for special performance obtained in the activity carried out in the Faculty of Automation and Computers (Timisoara, 2005).
- Recipient of the **Excellency Diploma** of the International Conference on Automation, Quality & Testing, Robotics AQTR 2004 (THETA 14, Cluj-Napoca, Romania).

Service and Member of Scientific and Technical Societies (<http://www.aut.upt.ro/~rprecup/soc.html>):

- The International Federation of Automatic Control (IFAC) Technical Committee on Computational Intelligence in Control (since 2002, previously named Cognition and Control).
- Senior Member, Institute of Electrical and Electronics Engineers (IEEE, since 2007), member of the Control Systems Society (since 2003), member of the Intelligent Transportation Systems Society (since 2003), member of the Computational Intelligence Society (since 2010), member of the Industrial Electronics Society (since 2011).
- The Task Force on Autonomous Learning Systems within the Neural Networks Technical Committee of the IEEE Computational Intelligence Society (since 2013).
- The Technical Committee on Computational Cybernetics of the IEEE Systems, Man, and Cybernetics Society (since 2014).
- The Technical Committee on Cyber-Medical Systems of the IEEE Systems, Man, and Cybernetics Society (since 2016).
- The Technical Committee on Virtual Systems in Measurements of the IEEE Instrumentation & Measurement Society (since 2008).
- The Subcommittee on Computational Intelligence as part of the Technical Committee on Control, Robotics and Mechatronics in the IEEE Industrial Electronics Society (since 2007).
- The Task Force on Educational Aspects of Standards of Computational Intelligence as part of the Technical Committee on Standards in the IEEE Computational Intelligence Society (since 2008).
- Machine Intelligence Research Labs (MIR Labs) (since 2017).

- ❑ The Working Group WG 12.9 on Computational Intelligence of the Technical Committee TC12 on Artificial Intelligence of the International Federation for Information Processing (IFIP, since 2011).
- ❑ European Society for Fuzzy Logic and Technology (EUSFLAT, since 2010).
- ❑ Romanian Society of Control Engineering and Technical Informatics (SRAIT, Bucharest, since 1993).
- ❑ Robotics Society of Romania (SRR, Craiova, since 1998).
- ❑ Romanian Society of Electrical Plants and Automation (SIEAR, Bucharest, since 1996).

Member of Editorial Boards (<http://www.aut.upt.ro/~rprecup/edboards.html>):

- *Guest Editor*, with Dr. Hak-Keung Lam (King's College London, UK), Dr. Bo Xiao (Imperial College London, UK) and Prof. Kazuo Tanaka (University of Electro-Communications, Tokyo, Japan), of the *Special Issue* on Membership-Function-Dependent Analysis and Design for Fuzzy-Model-Based Control Systems and their Applications, to be published in 2020 in the journal *IET Control Theory & Applications*, impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 3.526.
- *Guest Editor*, with Profs. Hans Hellendoorn (Delft University of Technology, The Netherlands) and Plamen Angelov (Lancaster University, UK), of the *Special Issue* on Synergy of computers, cognition, communication and control with industrial applications, published in the journal *Computers in Industry* (Elsevier Science), vol. 74, Dec. 2015, impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 4.769.
- Associate Editor of the journal *IEEE Transactions on Fuzzy Systems* (since 2018), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 8.759.
- Associate Editor of the journal *IEEE Transactions on Cybernetics* (since 2018), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 10.387.
- Member of the Editorial Board of the journal *Applied Soft Computing*, Elsevier Science (since 2014), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 4.873.
- Member of the Editorial Board of the journal *Evolving Systems*, Springer-Verlag, Germany (since 2014), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge).
- Editor of the journal *Cogent Engineering*, Taylor & Francis, UK (since 2017), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge).
- Member of the Topic Board of the journal *Energies*, MDPI, Switzerland (since 2017), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 2.707.
- Member of the Editorial Board of the journal *Machines*, MDPI, Switzerland (since 2017), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge).
- Member of the Editorial Board of the journal *Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science*, Romanian Academy, Romania (since 2018), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 1.402.
- Member of the Editorial Board of *Romanian Journal of Information Science and Technology*, Romanian Academy, Romania (since 2018), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2018 = 0.661.
- Associate Editor of the journal *Control Engineering and Applied Informatics*, Romanian Society of Control Engineering and Technical Informatics, Romania (since 2016), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 0.583.
- Track Chair of the journal *Acta Polytechnica Hungarica*, Óbuda University, Hungary (since 2014), Associate Editor (2012-2014), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 1.286.

- Member of the Editorial Board of the journal International Journal of Computers Communications & Control, Agora University, Romania (since 2017), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 1.585.
- Member of the Editorial Board of the journal Advances in Electrical and Computer Engineering, Stefan cel Mare University of Suceava, Romania (since 2007), indexed in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge), impact factor according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 0.650.
- Associate Editor of the journal CAAI Transactions on Intelligence Technology, Chinese Association for Artificial Intelligence (CAAI) and The Institution of Engineering and Technology (IET) (since 2019).
- *Editor-in-Chief* of the International Journal of Artificial Intelligence, CESER Publications, India (since 2008), indexed in SCOPUS.
- *Editor-in-Chief* of the International Journal of Imaging and Robotics, CESER Publications, India (since 2011), indexed until 2017 in SCOPUS.
- Editor of Paladyn, Journal of Behavioral Robotics, Versita, Poland, co-published first with Springer-Verlag and next with De Gruyter (since 2010), indexed in SCOPUS, DBLP.
- Editor of the International Journal of Tomography & Simulation, CESER Publications, India (since 2006), indexed until 2017 in SCOPUS.
- Member of the Editorial Board of International Journal of Advanced Intelligence Paradigms, Inderscience Publishers, UK (since 2009), indexed in SCOPUS, INSPEC.
- Editorial Advisory Board Member of Mediterranean Journal of Measurement and Control, SoftMotor Ltd, UK (since 2009), indexed until 2016 in SCOPUS, INSPEC.
- Editor of the International Journal of Soft Computing, Medwell Online, Pakistan (since 2007), indexed until 2016 in SCOPUS.
- Member of the Editorial Board of Journal of Electrical Engineering, Politehnica Publishing House, Romania (since 2012), indexed until 2017 in SCOPUS, INSPEC.
- Member of the Editorial Board of the journal Facta Universitatis, Series Automatic Control and Robotics, University of Niš, Serbia (since 2008).
- Associate Editor of the journal Gradus, John von Neumann University, Hungary (since 2014).
- Associate Editor of the International Journal of Computational Intelligence and Pattern Recognition, Columbia International Publishing, USA (2014-2016).
- Member of the Editorial Board of the Journal of Applied Mathematics, Hindawi Publishing Corporation, USA, indexed in SCOPUS (2014-2019).
- Member of the Editorial Board of The Open Cybernetics & Systemics Journal, Bentham Open, United Arab Emirates (2016-2018), indexed until 2018 in SCOPUS, Zentralblatt MATH, MathSciNet.
- Member of the Editorial Board of the journal Annals of The University of Craiova, Series: Automation, Computers, Electronics and Mechatronics (2015-2018), indexed until 2018 in INSPEC.
- Member of the Editorial Board of Scientific Bulletin of The Politehnica University of Timisoara, Transactions on Automatic Control and Computer Science (Timisoara, Romania) (1994-2004) and Associate Editor-in-Chief (2005-2016).

Member of International Program Committees (<http://www.aut.upt.ro/~rprecup/progcom.html>):

- **Co-Chair of the Control Systems and Applications Track**, with Prof. Kanghyun Jo (Korea) and Prof. Makoto Iwasaki (Japan), in the framework of **44th Annual Conference of the IEEE Industrial Electronics Society IECON'18** (Washington DC, USA).
- **Special Session Chair of IEEE Joint Conference on Neural Networks IJCNN 2013** (Dallas, TX, USA).
- **Special Session Chair** of 2017 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2017 (Ljubljana, Slovenia).
- **Special Session Chair** of 2016 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2016 (Natal, Brazil).
- **Publication Chair** of 7th International Conference on Swarm Intelligence ICSI'2016 (Bali, Indonesia), 6th International Conference on Swarm Intelligence and 2nd BRICS Congress on

Computational Intelligence ICSI-CCI'2015 (Beijing, China), 5th International Conference on Swarm Intelligence ICSI'2014 (Hefei and Huangshan, China), 4th International Conference on Swarm Intelligence ICSI'2013 (Harbin, China), 3rd International Conference on Swarm Intelligence ICSI'2012 (Shenzhen, China) and 2nd International Conference on Swarm Intelligence ICSI'2011 (Chongqing, China), with the proceedings indexed in **Clarivate Analytics Conference Proceedings Citation Index (formerly ISI Conference Proceedings Citation Index)**.

- **Publication Co-chair** of 11th International Conference on Swarm Intelligence ICSI'2020 (Belgrade, Serbia), 10th International Conference on Swarm Intelligence ICSI'2019 (Chiang Mai, Thailand) and 9th International Conference on Swarm Intelligence ICSI'2018 (Shanghai, China).
- **General Chair of the International Program Committee** of 23rd International Conference on System Theory, Control and Computing ICSTCC 2019 (Sinaia, Romania).
- **Vice-Chair of the International Program Committees** of 24th, 22nd and 21st International Conferences on System Theory, Control and Computing ICSTCC 2020, ICSTCC 2018 and ICSTCC 2017 (Sinaia, Romania).
- **General Co-Chair and Technical Program Committee Co-Chair** of IEEE 14th, 13th and 12th International Symposia on Applied Computational Intelligence and Informatics SACI 2020, SACI 2019 and SACI 2018 (Timisoara, Romania), with the proceedings indexed in **Clarivate Analytics Conference Proceedings Citation Index**.
- **General Co-Chair** of 15th International Conference on Development and Application Systems DAS 2020 (Suceava, Romania), technically co-sponsored by IEEE Industry Applications Society.
- IEEE 15th International Conference on System of Systems Engineering SoSE 2020 (Budapest, Hungary), 17th International Conference on Informatics in Control, Automation and Robotics ICINCO 2020 (Lieuxaint - Paris, France), 7th International Conference on Control, Decision and Information Technologies CoDIT 2020 (Prague, Czech Republic), 12th International Conference on Fuzzy Computation Theory and Applications FCTA 2020 (Budapest, Hungary), IEEE 24th International Conference on Intelligent Engineering Systems INES 2020 (Reykjavik, Iceland), IEEE 18th International Symposium on Intelligent Systems and Informatics SISY 2020 (Subotica, Serbia), 2020 6th International Conference on Control, Automation and Robotics ICCAR 2020 (Singapore), 12th International KES Conference on Intelligent Decision Technologies KES IDT 20 (Split, Croatia), 14th International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES AMSTA 20 (Split, Croatia), 13th International KES Conference on Human Centred Intelligent Systems KES HCIS 20 (Split, Croatia), 12th Asian Conference on Intelligent Information and Database Systems ACIIDS 2020 (Phuket, Thailand), 2020 IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2020 (Cluj-Napoca, Romania), 5th IFAC Conference on Intelligent Control and Automation Sciences ICONS 2019 (Belfast, UK), IEEE Symposium on Computational Intelligence in Control and Automation (IEEE CICA) within 2019 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2019, Xiamen, China), 18th IEEE International Conference on Machine Learning and Applications ICMLA 2019 (Boca Raton, FL, USA), 11th International Conference on Computational Collective Intelligence ICCCI 2019 (Hendaye, France), 16th International Conference on Informatics in Control, Automation and Robotics ICINCO 2019 (Prague, Czech Republic), 11th International Conference on Fuzzy Computation Theory and Applications FCTA 2019 (Vienna, Austria), 6th International Conference on Control, Decision and Information Technologies CoDIT'19 (Paris, France), 7th IFAC Symposium on Systems Structure and Control SSSC 2019 (Sinaia, Romania), 16th International Conference on Distributed Computing and Artificial Intelligence DCAI'19 (Avila, Spain), 23rd IEEE International Conference on Intelligent Engineering Systems INES 2019 (Gödöllő, Hungary), 13th International Symposium on Intelligent Distributed Computing IDC 2019 (Saint-Petersburg, Russia), 19th International Conference on Intelligent Systems Design and Applications ISDA 2019 (Pretoria, South Africa), International Symposium on Information Systems and Engineering ISE 2019 within 17th International Conference on High Performance Computing & Simulation HPCS 2019 (Dublin, Ireland), 19th International Conference on Hybrid Intelligent Systems HIS 2019 (VIT Bhopal University, India), 11th Asian Conference on Intelligent Information and Database Systems ACIIDS 2019 (Yogyakarta, Indonesia), Second International Conference on Artificial Intelligence for Industries ai4i 2019 (Laguna Hills, CA, USA), 11th International KES Conference on Intelligent Decision Technologies KES-IDT-19 (St. Julians, Malta), 13th International KES Conference on Agents and Multi-Agent

Systems: Technologies and Applications KES-AMSTA-19 (St. Julians, Malta), 12th International KES Conference on Intelligent Interactive Multimedia: Systems and Services KES-IIMSS-19 (St. Julians, Malta), 10th IEEE International Conference on Cognitive Infocommunications CogInfoCom 2019 (Naples, Italy), IEEE Joint 19th International Symposium on Computational Intelligence and Informatics and 7th International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics CINTI-MACRo 2019 (Szeged, Hungary), 17th IEEE International Symposium on Intelligent Systems and Informatics SISY 2019 (Subotica, Serbia), 20th International Carpathian Control Conference ICC 2019 (Krakow-Wieliczka, Poland), Second International Conference on Advanced Computational and Communication Paradigms ICACCP 2019 (Sikkim, India), 6th International Conference on Electrical, Electronic and Computing Engineering IcETRAN 2019 (Srebrno Jezero, Serbia), 7th International Conference on Transportation & Logistics TIL 2019 (Niš, Serbia), 3rd International Conference on Computing and Network Communications CoCoNet'19 (Trivandrum, Kerala, India), 11th International Conference on Electronics, Computers and Artificial Intelligence ECAI 2019 (Pitesti, Romania), 7th International Workshop on Systems Safety & Security IWSSS 2019 (Pitesti, Romania), 37th Conference of the North American Fuzzy Information Processing Society NAFIPS 2018 (Fortaleza, Brazil), 17th IEEE International Conference on Machine Learning and Applications ICMLA 2018 (Orlando, FL, USA), 3rd IFAC Conference on Embedded Systems, Computational Intelligence and Telematics in Control CESCIT 2018 (Faro, Portugal), 5th International Conference on Control, Decision and Information Technologies CoDIT'18 (Thessaloniki, Greece), 9th International Conference on Cognitive Infocommunications CogInfoCom 2018 (Budapest, Hungary), 10th International Joint Conference on Computational Intelligence IJCCI 2018 (Seville, Spain), 6th World Conference on Information Systems and Technologies WorldCist'18 (Naples, Italy), 10th International Conference on Computational Collective Intelligence ICCCI 2018 (Bristol, UK), 22nd IEEE International Conference on Intelligent Engineering Systems INES 2018 (Las Palmas de Gran Canaria, Spain), 2018 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2018 (Rhodes, Greece), 2018 IEEE International Symposium on INnovations in Intelligent SysTems and Applications INISTA 2018 (Thessaloniki, Greece), IEEE 18th International Symposium on Computational Intelligence and Informatics CINTI 2018 (Budapest, Hungary), 16th International Symposium on Intelligent Systems and Informatics SISY 2018 (Subotica, Serbia), 10th International KES Conference on Intelligent Decision Technologies KES-IDT-18 (Gold Coast, Australia), 12th International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES-AMSTA-18 (Gold Coast, Australia), 11th International KES Conference on Intelligent Interactive Multimedia: Systems and Services KES-IIMSS-18 (Gold Coast, Australia), 10th International Conference on Soft Computing and Pattern Recognition SoCPaR 2018 (Porto, Portugal), 18th International Conference on Hybrid Intelligent Systems HIS 2018 (Porto, Portugal), 19th International Carpathian Control Conference ICC 2018 (Szilvasvarad, Hungary), 2nd International Symposium on Small-scale Intelligent Manufacturing Systems SIMS 2018 (Cavan, Ireland), International Conference Cybernetics & Informatics 2018 (Lazy pod Makytou, Slovak Republic), Fourth International Symposium on Signal Processing and Intelligent Recognition Systems SIRS'18 (Bangalore, India), 7th International Conference on Advances in Computing, Communications and Informatics ICACCI'18 (Bangalore, India), XIV International Conference on Systems, Automatic Control and Measurements SAUM 2018 (Nis, Serbia), International Conference Automatics and Informatics'2018 (Sofia, Bulgaria), 2018 IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2018 (Cluj-Napoca, Romania), 6th International Workshop on Systems Safety & Security IWSSS 2018 (Iasi, Romania), International Conference on Modern Intelligent Systems Concepts MISC 2018 (Rabat, Morocco), 26th International Joint Conference on Artificial Intelligence IJCAI 2017 (Melbourne, Australia), 16th IEEE International Conference on Machine Learning and Applications ICMLA 2017 (Cancun, Mexico), 14th International Conference on Informatics in Control, Automation and Robotics ICINCO 2017 (Madrid, Spain), 9th International Joint Conference on Computational Intelligence IJCCI 2017 (Funchal, Madeira, Portugal), IEEE 21st International Conference on Intelligent Engineering Systems INES 2017 (Larnaca, Cyprus), 2017 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2017 (Ljubljana, Slovenia), 9th International KES Conference on Intelligent Decision Technologies KES-IDT-17 (Vilamoura, Algarve, Portugal), 11th International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES-AMSTA-17 (Vilamoura, Algarve, Portugal), 10th International KES Conference on Intelligent Interactive Multimedia: Systems

and Services KES-IIMSS-17 (Vilamoura, Algarve, Portugal), 3rd Global Conference on Artificial Intelligence GCAI 2017 (Miami, FL, USA), 5th World Conference on Information Systems and Technologies WorldCist'17 (Porto Santo Island, Madeira, Portugal), 11th International Symposium on Intelligent Distributed Computing IDC 2017 (Belgrade, Serbia), 9th International Conference on Computational Collective Intelligence ICCCI 2017 (Nicosia, Cyprus), 8th International Conference on Cognitive Infocommunications CogInfoCom 2017 (Debrecen, Hungary), IEEE 15th International Symposium on Intelligent Systems and Informatics SISY 2017 (Subotica, Serbia), 8th EAI International Conference on Big Data Technologies and Applications BDTA 2017 (Gwangju, South Korea), Spring Conference of IEEE Region 10 TENSYP 2017 (Cochin, Kerala, India), Second International Conference on Advanced Wireless Information, Data, and Communication Technologies AWICT 2017 (Paris, France), 3rd International Integrated (Web & Offline) Conference & Concert on Convergence with Academic & Job Fair ICCC 2017 (Hangzhou, China), 5th International Workshop on Systems Safety & Security IWSSS 2017 (Targoviste, Romania), 25th International Joint Conference on Artificial Intelligence IJCAI-16 (New York City, USA), 2016 Annual Conference of the North American Fuzzy Information processing Society NAFIPS'2016 (El Paso, TX, USA), 4th IFAC International Conference on Intelligent Control and Automation Sciences ICONS 2016 (Reims, France), 2016 IEEE Symposium on Evolving and Autonomous Learning Systems EALS 2016 as part of 2016 IEEE Symposium Series on Computational Intelligence SSCI 2016 (Athens, Greece), 13th International Conference on Informatics in Control, Automation and Robotics ICINCO 2016 (Lisbon, Portugal), 20th Jubilee IEEE International Conference on Intelligent Engineering Systems INES 2016 (Budapest, Hungary), 11th International Workshop on Enterprise Integration, Interoperability and Networking EI2N 2016 (Rhodes, Greece), 8th IEEE International Conference on Intelligent Systems IS'16 (Sofia, Bulgaria), 13th International Conference on Distributed Computing and Artificial Intelligence DCAI'16 (Sevilla, Spain), 8th International Conference on Fuzzy Computation Theory and Applications FCTA 2016 (Porto, Portugal), 17th International Carpathian Control Conference ICC'2016 (High Tatras, Slovakia), 8th International Conference on Computational Collective Intelligence ICCCI 2016 (Halkidiki, Greece), 10th International Symposium on Intelligent Distributed Computing IDC'2016 (Paris, France), 7th Conference on Cognitive Infocommunications CogInfoCom 2016 (Wroclaw, Poland), IEEE 14th International Symposium on Intelligent Systems and Informatics SISY 2016 (Subotica, Serbia), XIII International Conference on Systems, Automatic Control and Measurements SAUM 2016 (Nis, Serbia), 2016 IEEE International Symposium on INnovations in Intelligent Systems and Applications INISTA 2016 (Sinaia, Romania), Seventh International Conference on Sciences of Electronics, Technologies of Information and Telecommunications SETIT 2016 (Hammamet, Tunisia), Third International Afro-European Conference for Industrial Advancement AECIA 2016 (Marrakesh, Morocco), 8th International KES Conference on Intelligent Decision Technologies KES-IDT-16 (Puerto de la Cruz, Tenerife, Spain), 10th International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES-AMSTA-16 (Puerto de la Cruz, Tenerife, Spain), 9th International KES Conference on Intelligent Interactive Multimedia: Systems and Services KES-IIMSS-16 (Puerto de la Cruz, Tenerife, Spain), 3rd International Symposium on Big Data and Cloud Computing Challenges ISBCC 2016 (Chennai, India), 4th World Conference on Information Systems and Technologies WorldCist'16 (Recife, PE, Brazil), 7th EAI International Conference on Big Data Technologies and Applications BDTA 2016 (Seoul, South Korea), 1st International Symposium on Small-scale Intelligent Manufacturing Systems SIMS 2016 (Narvik, Norway), 4th International Conference on Applied Mechanics, Mechatronics and Intelligent System AMMIS 2016 (Beijing, China), 2nd International Conference on Mechanics and Control Engineering MCE 2016 (Guangzhou, China), 2016 IEEE First International Conference on Control, Measurement and Instrumentation CMI 2016 (Kolkata, India), International Conference on Computers, Data Management and Technology Applications ICCDMTA'2016 (Istanbul, Turkey), International Conference on Advanced Computing and Intelligent Engineering ICACIE 2016 (Bhubaneswar, Odisha, India), 6th International Conference on Computers Communications and Control IEEE - ICCCC2016 (Oradea, Romania), 5th International Conference on Advances in Computing, Communications and Informatics ICACCI'16 (Jaipur, India), International Conference on Intelligent Cloud Computing ICC 2016 (Wuhan, China), 20th International Conference on System Theory, Control and Computing Joint Conference SINTES 20, SACCS 16, SIMSIS 20 - ICSTCC 2016 (Sinaia, Romania), 2016 IEEE International Conference on Automation, Quality and Testing,

Robotics AQTR 2016 (Cluj-Napoca, Romania), 4th International Workshop on Systems Safety & Security IWSSS 2016 (Ploiesti, Romania), 2015 IEEE International Conference on Systems, Man, and Cybernetics SMC 2015 (Hong Kong), IEEE International Symposium on Intelligent Control ISIC 2015 as part of 2015 IEEE Multi-Conference on Systems and Control MSC 2015 (Sydney, Australia), 2nd IFAC Conference on Embedded Systems, Computational Intelligence and Telematics in Control CESCIT 2015 (Maribor, Slovenia), 2015 Annual Conference of the North American Fuzzy Information processing Society NAFIPS'2015 (Redmond, WA, USA), 27th IEEE International Conference on Tools with Artificial Intelligence ICTAI 2015 (Vietri sul Mare, Italy), 2015 IEEE International Symposium on INnovations in Intelligent SysTEms and Applications INISTA 2015 (Madrid, Spain), 12th International Conference on Informatics in Control, Automation and Robotics ICINCO 2015 (Colmar, France), 2015 IEEE Symposium on Evolving and Autonomous Learning Systems EALS'15 as part of 2015 IEEE Symposium Series on Computational Intelligence SSCI 2015 (Cape Town, South Africa), IEEE 19th International Conference on Intelligent Engineering Systems INES 2015 (Bratislava, Slovakia), 9th International Symposium on Intelligent Distributed Computing IDC'2015 (Guimaraes, Portugal), 8th International Conference on Evolutionary Multi-Criterion Optimization EMO 2015 (Guimaraes, Portugal), 6th Conference on Cognitive Infocommunications CogInfoCom 2015 (Győr, Hungary), 24th International Conference on Systems Engineering ICSE 2015 (Coventry, UK), Second International Afro-European Conference for Industrial Advancement AECIA 2015 (Villejuif, France), 7th International KES Conference on Intelligent Decision Technologies KES-IDT-15 (Sorrento, Italy), 9th International KES Conference on Agents and Multi-Agent Systems: Technologies and Applications KES-AMSTA-15 (Sorrento, Italy), 8th International KES Conference on Intelligent Interactive Multimedia: Systems and Services KES-IIMSS-15 (Sorrento, Italy), Second International Symposium on Signal Processing and Intelligent Recognition Systems SIRS'15 (Trivandrum, India), International Conference on Green and Human Information Technology ICGHIT 2015 (Da Nang, Vietnam), XII International Scientific Conference MMA 2015 (Novi Sad, Serbia), International Conference on Soft Computing in Applied Engineering & Sciences ICSCASE-2015 (Kumaracoil, Tamilnadu, India), First International Conference on Biological Engineering and Gene Technology BEGT 2015 (Shanghai, China), 19th International Conference on System Theory, Control and Computing ICSTCC 2015 (Cheile Gradistei-Fundata Resort, Romania), 3rd International Workshop on Systems Safety & Security IWSSS 2015 (Bucharest, Romania), 2014 IEEE International Instrumentation and Measurement Technology Conference I²MTC 2014 (Montevideo, Uruguay), 2014 IEEE International Conference on Fuzzy Systems FUZZ-IEEE 2014 (Beijing, China), 2014 IEEE Congress on Evolutionary Computation IEEE CEC 2014 (Beijing, China), IEEE International Symposium on Intelligent Control ISIC 2014 as part of 2014 IEEE Multi-Conference on Systems and Control MSC 2014 (Antibes/Nice, France), 11th International Conference on Informatics in Control, Automation and Robotics ICINCO 2014 (Vienna, Austria), 18th Online World Conference on Soft Computing in Industrial Applications WSC 18, IEEE 18th International Conference on Intelligent Engineering Systems INES 2014 (Tihany, Hungary), 7th IEEE International Conference on Intelligent Systems IS'14 (Warsaw, Poland), 15th IEEE International Symposium on Computational Intelligence and Informatics CINTI 2014 (Budapest, Hungary), 5th Conference on Cognitive Infocommunications CogInfoCom 2014 (Vietri sul Mare, Italy), 2014 IEEE International Conference on Tools with Artificial Intelligence ICTAI 2014 (Limassol, Cyprus), 6th International Conference on Computational Collective Intelligence Technologies and Applications ICCCI 2014 (Seoul, Korea), 8th International KES Conference on Agents and Multi-agent Systems KES AMSTA 2014 (Chania, Greece), 6th International Conference on Intelligent Decision Technologies KES IDT 2014 (Chania, Greece), 7th International KES Conference on Intelligent Interactive Multimedia Systems and Services KES IIMSS 2014 (Chania, Greece), 3rd International Conference on Advances in Computing, Communications and Informatics ICACCI 2014 (New Delhi, India), 8th International Symposium on Intelligent Distributed Computing IDC'2014 (Madrid, Spain), 2014 UKACC 10th International Conference on Control CONTROL 2014 (Loughborough, UK), XII International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2014 (Nis, Serbia), First International Afro-European Conference for Industrial Advancement AECIA 2014 (Addis Ababa, Ethiopia), 2013 IEEE International Conference on Systems, Man, and Cybernetics SMC 2013 (Manchester, UK), IEEE International Conference on Tools with Artificial Intelligence ICTAI 2013 (Washington, DC, USA), 2013 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications CIVEMSA 2013 (Milan, Italy),

IEEE 17th International Conference on Intelligent Engineering Systems INES 2013 (Costa Rica), 5th IEEE International Symposium on Logistics and Industrial Informatics LINDI 2013 (Wildau, Germany), 7th International Symposium on Intelligent Distributed Computing IDC'2013 (Prague, Czech Republic), 5th International Conference on Intelligent Decision Technologies KES IDT 2013 (Sesimbra, Portugal), 6th International Conference on Intelligent Interactive Multimedia Systems and Services KES IIMSS 2013 (Sesimbra, Portugal), 5th International Conference on Computational Collective Intelligence Technologies and Applications ICCCI 2013 (Craiova, Romania), International Conference "Automatics and Informatics'2013" (Sofia, Bulgaria), 2012 IEEE International Instrumentation and Measurement Technology Conference I²MTC 2012 (Graz, Austria), 4th IEEE International Symposium on Logistics and Industrial Informatics LINDI 2012 (Smolenice, Slovakia), 1st IFAC Conference on Embedded Systems, Computational Intelligence and Telematics in Control CESCIT 2012 (Würzburg, Germany), 17th Online World Conference on Soft Computing in Industrial Applications WSC17, 2012 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2012 (Tianjin, China), 2012 IEEE International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2012 (Tianjin, China), 16th IEEE International Conference on Intelligent Engineering Systems INES 2012 (Lisbon, Portugal), 4th IEEE International Conference on Nonlinear Science and Complexity NSC 2012 (Budapest, Hungary), 2012 UKACC International Conference on Control (Cardiff, UK), 22nd International Conference on Systems Engineering ICSE 2012 (Coventry, UK), 5th International Conference on Intelligent Interactive Multimedia Systems and Services KES IIMSS 2012 (Gifu, Japan), 6th International KES Conference on Agents and Multi-agent Systems - Technologies and Applications KES AMSTA 2012 (Dubrovnik, Croatia), 6th International Symposium on Intelligent Distributed Computing IDC 2012 (Calabria, Italy), XI International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2012 (Nis, Serbia), 2011 IEEE International Conference on Systems, Man, and Cybernetics SMC 2011 (Anchorage, AK, USA), 2011 IEEE International Instrumentation and Measurement Technology Conference I²MTC 2011 (Binjiang, Hangzhou, China), 2011 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2011 (Ottawa, ON, Canada), 2011 IEEE Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2011 (Ottawa, ON, Canada), 16th IEEE International Conference on Emerging Technologies and Factory Automation ETFA 2011 (Toulouse, France), 3rd International Conference on Intelligent Decision Technologies KES-IDT-2011 (Piraeus, Greece), 15th IEEE International Conference on Intelligent Engineering Systems INES 2011 (Poprad, Slovakia), 5th International Symposium on Computational Intelligence and Intelligent Informatics ISCIII 2011 (Floriana, Malta), 3rd IEEE International Symposium on Logistics and Industrial Informatics LINDI 2011 (Budapest, Hungary), 5th International Symposium on Intelligent Distributed Computing IDC 2011 (Delft, The Netherlands), 16th Online World Conference on Soft Computing in Industrial Applications WSC16, 2010 IEEE International Conference on Systems, Man, and Cybernetics SMC 2010 (Istanbul, Turkey), 2010 IEEE International Instrumentation & Measurement Technology Conference I²MTC 2010 (Austin, TX, USA), 2010 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2010 (Taranto, Italy), 2010 IEEE Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2010 (Taranto, Italy), IEEE International Workshop on Robotic and Sensors Environments ROSE 2010 (Phoenix, AZ, USA), 14th IEEE International Conference on Intelligent Engineering Systems INES 2010 (Las Palmas de Gran Canaria, Spain), 10th International Conference on Hybrid Intelligent Systems HIS 2010 (Atlanta, GA, USA), IFAC Workshop on Intelligent Control Systems WICS2010 (Sinaia, Romania), UKACC International Conference on Control CONTROL 2010 (Coventry, UK), 4th International Symposium on Intelligent Distributed Computing IDC'2010 (Tangier, Morocco), World Congress on Nature and Biologically Inspired Computing NaBIC 2010 (Kitakyushu, Japan), X Triennial International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2010 (Nis, Serbia), 15th Online World Conference on Soft Computing in Industrial Applications WSC15, 5th IEEE International Conference on Mechatronics ICM 2009 (Málaga, Spain), 2nd IFAC International Conference on Intelligent Control Systems and Signal Processing ICONS'09 (Istanbul, Turkey), 2009 IEEE Workshop on Computational Intelligence in Virtual Environments IEEE CIVE 2009 (Nashville, TN, USA), 2009 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2009 (Hong Kong, China), 2009 IEEE Conference

on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2009 (Hong Kong, China), 7th IEEE International Conference on Computational Cybernetics ICC 2009 (Palma de Mallorca, Spain), 5th IEEE International Vehicle Power and Propulsion Conference VPPC'09 (Dearborn, MI, USA), World Congress on Nature & Biologically Inspired Computing NaBIC2009 (Bhubaneswar, India), 2nd International Symposium on Intelligent Interactive Multimedia Systems and Services KES-IIMSS-09 (Mogliano Veneto, Italy), 4th International Symposium on Computational Intelligence and Intelligent Informatics ISCII 2009 (Egypt), 20th International Conference on Systems Engineering ICSE2009 (Coventry, UK), IEEE International Workshop on Robotic and Sensors Environments ROSE 2009 (Lecco, Italy), 2009 Online World Conference on Soft Computing in Industrial Applications WSC14, 3rd International Workshop on Soft Computing Applications SOFA 2009 (Szeged, Hungary, Arad, Romania), Workshop on Multi-Sensor Systems for Surveillance Applications MUSES'09 (Ottawa, ON, Canada), 9th Polish-British Workshop on Computer Systems Engineering Theory and Applications (Stronie Slaskie, Poland, 2009), 2008 IEEE International Instrumentation & Measurement Technology Conference I²MTC 2008 (Victoria, BC, Canada), 8th International Conference on Hybrid Intelligent Systems HIS 2008 (Barcelona, Spain), 2008 IEEE Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems VECIMS 2008 (Istanbul, Turkey), 2008 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications CIMSA 2008 (Istanbul, Turkey), 2008 Online World Conference on Soft Computing in Industrial Applications WSC-2008, 8th Polish-British Workshop on Computer Systems Engineering Theory and Applications (Sokolowska, Poland, 2008), 3rd IFAC Workshop on Advanced Fuzzy and Neural Control AFNC 07 (Valenciennes, France), 7th International Conference on Hybrid Intelligent Systems HIS'07 (Kaiserslautern, Germany), 2007 IEEE International Conference on Virtual Environments, Human-Computer Interfaces, and Measurement Systems VECIMS 2007 (Ostuni, Italy), The IEEE Region 8 International Conference "Computer as a Tool" EUROCON 2007 (Warsaw, Poland), 3rd IEEE International Conference on Mechatronics ICM 2006 (Budapest, Hungary), International Conference on Hybrid Intelligent Systems HIS'06 (Auckland, New Zealand), 4th Conference on Neuro-Computing and Evolving Intelligence NCEI'06 (Auckland, New Zealand), 2005 IEEE International Conference on Control and Automation ICCA2005 (Budapest, Hungary), 5th International Symposium on Intelligent Automation and Control ISAC 2004 as part of World Automation Congress WAC 2004 (Sevilla, Spain), Second Workshop on Fuzzy Based Expert Systems FUBEST'96, Sofia (Bulgaria), and several international conferences organized in Romania.

- **Technical Program Committee Chair** of IEEE International Joint Conferences on Computational Cybernetics and Technical Informatics ICC-CONTI 2010 (Timisoara, Romania), with the proceedings indexed in **Clarivate Analytics Conference Proceedings Citation Index**.
- **Technical Program Committee Co-Chair** of 4th and 5th International Symposia on Applied Computational Intelligence and Informatics SACI 2007 and SACI 2009, of 6th, 7th, 8th, 9th, 10th and 11th IEEE International Symposia on Applied Computational Intelligence and Informatics SACI 2011, SACI 2012, SACI 2013, SACI 2014, SACI 2015 and SACI 2016 (Timisoara, Romania), with SACI 2007, SACI 2009, SACI 2013, SACI 2014 and SACI 2015 proceedings indexed in **Clarivate Analytics Conference Proceedings Citation Index**, and SACI 2011, SACI 2012 and SACI 2016 proceedings indexed in **IEEE Xplore** and **INSPEC**.
- **Member of the Steering Committee** of 8th, 9th, 10th and 11th IEEE International Symposia on Applied Computational Intelligence and Informatics SACI 2013, SACI 2014, SACI 2015 and SACI 2016 (Timisoara, Romania), with SACI 2013, SACI 2014 and SACI 2015 proceedings indexed in **Clarivate Analytics Conference Proceedings Citation Index**, and SACI 2016 proceedings indexed in **IEEE Xplore** and **INSPEC**.
- **Chair of the Track TT05: Mechatronics, Industrial Automation and Control**, with Prof. Seta Bogosyan (University of Alaska-Fairbanks, Fairbanks, AK, USA), in the framework of 13th International Conference on Optimization of Electrical and Electronic Equipment OPTIM 2012 (Brasov, Romania), with the proceedings indexed in **IEEE Xplore** and **INSPEC**.
- **Chair of the Track VII: Cognition**, with Prof. Claudiu Pozna (Szechenyi Istvan University, Gyor, Hungary, and Transilvania University of Brasov, Romania), in the framework of 3rd IEEE International Conference on Cognitive Infocommunications CogInfoCom 2012 (Kosice, Slovakia), with the proceedings indexed in **IEEE Xplore** and **INSPEC**.

Reviewing (<http://www.aut.upt.ro/~rprecup/review.html>):

- Journal reviewer: Automatica (Elsevier Science), IEEE Transactions on Cybernetics, Fuzzy Sets and Systems (Elsevier Science), IEEE Transactions on Fuzzy Systems, IEEE Transactions on Systems, Man, and Cybernetics, IEEE Transactions on Industrial Electronics, IEEE Computational Intelligence Magazine, IEEE Transactions on Industrial Informatics, IEEE/ASME Transactions on Mechatronics, IEEE Transactions on Automation Science and Engineering, International Journal of Robust and Nonlinear Control (Wiley), Computers in Industry (Elsevier Science), IEEE Transactions on Instrumentation and Measurement, Information Sciences (Elsevier Science), Engineering Applications of Artificial Intelligence (Elsevier Science), Applied Soft Computing (Elsevier Science), Mechatronics (Elsevier Science), Knowledge-Based Systems (Elsevier Science), Expert Systems with Applications (Elsevier Science), International Journal of Systems Science (Taylor & Francis), Journal of Guidance, Control, and Dynamics (The American Institute of Aeronautics and Astronautics, AIAA), Transportation Research Part C (Elsevier Science), Industrial & Engineering Chemistry Research (American Chemical Society), Information Fusion (Elsevier Science), Robotics and Computer-Integrated Manufacturing (Elsevier Science), Digital Signal Processing (Elsevier Science), Computer Methods and Programs in Biomedicine (Elsevier Science), Environmental Modelling & Software (Elsevier Science), Robotics and Autonomous Systems (Elsevier Science), IEEE Transactions on Education, Engineering Optimization (Taylor & Francis), Journal of Industrial and Engineering Chemistry (Elsevier Science), Chemical Engineering Science (Elsevier Science), Environmental Science and Pollution Research (Springer-Verlag), Journal of Environmental Science and Health, Part A (Taylor & Francis), Journal of Chemometrics (John Wiley and Sons), ISA Transactions (Elsevier Science), Asian Journal of Control (Wiley InterScience), Chemical Engineering and Processing: Process Intensification (Elsevier Science), Bioprocess and Biosystems Engineering (Springer-Verlag), Advances in Engineering Software (Elsevier Science), Fuzzy Optimization and Decision Making (Springer-Verlag), Soft Computing (Springer-Verlag), International Journal of Electrical Power and Energy Systems (Elsevier Science), Simulation Modelling Practice and Theory (Elsevier Science), Computers and Mathematics with Applications (Elsevier Science), Theoretical Computer Science (Elsevier Science), Artificial Intelligence in Medicine (Elsevier Science), International Journal of Adaptive Control and Signal Processing (John Wiley and Sons), SIAM Journal on Matrix Analysis and Applications, Journal of Dynamic Systems, Measurement, and Control (ASME), Journal of Computational and Nonlinear Dynamics (ASME), IET Control Theory & Applications (The Institution of Engineering and Technology, UK), IET Generation, Transmission & Distribution (The Institution of Engineering and Technology, UK), Journal of Biotechnology (Elsevier Science), International Journal of Control, Automation, and Systems (Institute of Control, Robotics and Systems, Korean Institute of Electrical Engineers and Springer-Verlag), Neurocomputing (Elsevier Science), Ocean Engineering (Elsevier Science), International Journal of Electronics (Taylor & Francis), International Journal of Automation and Computing (Springer-Verlag), Fuzzy Information and Engineering (Springer-Verlag and Guangzhou University, China), International Journal of Chemical Reactor Engineering (De Gruyter), Reviews in Chemical Engineering (De Gruyter), Strojniški vestnik - Journal of Mechanical Engineering (Ljubljana, Slovenia), Journal of Power Technologies (Warsaw, Poland), Electronics and Electrical Engineering (Lithuania), Applied and Computational Mathematics (Azerbaijan National Academy of Sciences), Acta Polytechnica Hungarica (Budapest, Hungary), Thermal Science (Society of Thermal Engineers of Serbia), Chemical Industry & Chemical Engineering Quarterly (Belgrade, Serbia), Computer Science and Information Systems (ComSIS Consortium), Tehnički vjesnik – Technical Gazette (Osijek, Croatia), Applications and Applied Mathematics (Prairie View, TX, USA), International Journal of Computational Intelligence and Applications (World Scientific), Facta Universitatis (Niš, Serbia), Proceedings of the Romanian Academy Series A: Mathematics, Physics, Technical Sciences, Information Science (Bucharest, Romania), Control Engineering and Applied Informatics (Bucharest, Romania), Scientific Bulletin of The “Politehnica” University of Timisoara, Transactions on Automatic Control and Computer Science (Timisoara, Romania).
- Conference reviewer: 2018 American Control Conference, European Control Conference ECC 2018, 56th IEEE Conference on Decision and Control CDC 2017, 20th World Congress of International Federation of Automatic Control IFAC 2017, 19th World Congress of International Federation of Automatic Control IFAC 2014, European Control Conference ECC 2014, 2014 IEEE International

Instrumentation and Measurement Technology Conference I²MTC 2014, 17th International IEEE Conference on Intelligent Transportation Systems ITSC 2014, IEEE Symposium Series on Computational Intelligence SSCI 2014, 2014 IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 2014, 22nd Mediterranean Conference on Control & Automation MED'2014, 2014 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications CIVEMSA 2014, 2014 IEEE International Symposium on INnovations in Intelligent SysTems and Applications INISTA 2014, 2014 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2014, 2013 IEEE Multi-Conference on Systems and Control MSC 2013, 2013 International Joint Conference on Neural Networks IJCNN 2013, 39th Annual Conference of the IEEE Industrial Electronics Society IECON 2013, 2013 IEEE International Instrumentation and Measurement Technology Conference I²MTC 2013, 10th IFAC Symposium on Advances in Control Education ACE 2013, 2nd IFAC Workshop on Convergence of Information Technologies and Control Methods with Power Systems ICPS'13, 51st IEEE Conference on Decision and Control CDC 2012, 2012 International Joint Conference on Neural Networks IJCNN 2012, 18th World Congress of International Federation of Automatic Control IFAC 2011, 2011 IEEE International Instrumentation and Measurement Technology Conference I²MTC 2011, 9th IEEE International Conference on Control & Automation ICCA'11, 2011 International Conference on Communications, Computing and Control Applications CCCA'11, American Control Conference 2010, 2010 IEEE International Conference on Systems, Man, and Cybernetics SMC 2010, 2010 IEEE International Instrumentation & Measurement Technology Conference I²MTC 2010, IEEE International Symposium on Industrial Electronics ISIE 2010, 8th IEEE International Conference on Control & Automation ICCA2010, 9th IFAC Workshop on Time Delay Systems IFAC - TDS 2010, 22th International Conference on Tools with Artificial Intelligence ICTAI 2010, 2010 Conference on Control and Fault-Tolerant Systems SysTol'10, IFAC Workshop on Intelligent Control Systems WICS2010, 3rd IEEE International Symposium on Resilient Control Systems ISRCS 2010, 3rd International Conference on Human System Interaction HSI '10, European Control Conference 2009 ECC'09, 3rd IEEE Multi-conference on Systems and Control MSC 2009, 48th IEEE Conference on Decision and Control CDC/CCC 09, 2nd IEEE International Symposium on Resilient Control Systems ISRCS 09, 2nd IFAC International Conference on Intelligent Control Systems and Signal Processing ICONS'09, American Control Conference 2008, 17th World Congress of International Federation of Automatic Control IFAC 2008, 2008 IEEE International Instrumentation & Measurement Technology Conference I²MTC 2008, 2nd IEEE Multi-conference on Systems and Control MSC 2008, American Control Conference 2007, 2007 IEEE Conference on Decision and Control CDC07, 4th IEEE International Conference on Mechatronics ICM 2007, IEEE International Conference on Control Applications 2006 CCA, 3rd IEEE International Conference on Mechatronics ICM 2006, IEEE International Conference on Control Applications 2005 CCA, 16th World Congress of International Federation of Automatic Control IFAC 2005, 2003 ACM Symposium on Applied Computing SAC'03, American Control Conference 2002, etc.

Organization of Academic Conferences (<http://www.aut.upt.ro/~rprecup/organiz.html>):

- **Co-chair of the National Organizing Committee** of Joint IFAC Conference 7th IFAC Symposium on Systems Structure and Control SSSC 2019 and 15th IFAC Workshop on Time Delay Systems TDS 2019 (Sinaia, Romania).
- Member of International Organizing Committees: 1st IFAC Workshop on Convergence of Information Technologies and Control Methods with Power Plants and Power Systems ICPS'07 (Cluj-Napoca, Romania), IEEE International Workshop on Soft Computing Applications IEEE - SOFA 2005 (Szeged, Hungary, Arad, Romania), South-eastern Europe, USA, Japan and European Community Workshop on Research and Education in Control and Signal Processing REDISCOVER 2004 (Cavtat, Croatia).
- **Organizer and chair** of the **Special Session 5: Fuzzy Control, Modeling and Optimization**, in the framework of 6th International Conference on Computers Communications and Control IEEE - ICCCC2016 (Oradea, Romania).
- **Organizer**, with Drs. Jérôme Mendes (Institute of Systems and Robotics (ISR-UC), Portugal), João Paulo (Institute of Systems and Robotics (ISR-UC), Portugal), Cristiano Premebida (Loughborough University, UK) and Rui Araújo (University of Coimbra, Portugal), of the **Special Session** on

Computational Intelligence Systems: Iterative, Dynamic, and Evolving Design, in the framework of 45th Annual Conference of the IEEE Industrial Electronics Society IECON 2019 (Lisbon, Portugal).

- **Organizer**, with Profs. Plamen Angelov (Lancaster University, UK), Bruno Costa (Federal Institute of Rio Grande do Norte (IFRN), Natal, Brazil), Luiz Affonso Guedes (Federal University of Rio Grande do Norte (UFRN), Natal, Brazil), Moamar Sayed-Mouchaweh (High National Engineering School of Mines, Douai, France) and Igor Škrjanc (University of Ljubljana, Slovenia), of the **Special Session** on Autonomous Fault Detection and Identification Methods, in the framework of 2nd IEEE International Conference on Cybernetics CYBCONF 2015 (Gdynia, Poland).
- **Co-chair**, with Profs. Igor Škrjanc (University of Ljubljana, Slovenia) and Plamen Angelov (Lancaster University, UK), of the **Invited Session** on Applications of Data-Driven Approaches to Modeling, Identification, Prediction and Optimization for Intelligent Control and Planning, in the framework of 2014 IEEE Multi-Conference on Systems and Control MSC 2014 (Antibes, France).
- **Co-chair**, with Profs. Keith J Burnham (Coventry University, UK), Leszek Koszalka (Wroclaw University of Technology, Poland) and Henry Selvaraj (University of Nevada, Las Vegas, NV, USA), of the **Special Session** on Artificial Intelligence in Systems Modelling, Optimisation and Control for Enhanced Computer Networks, Manufacturing Logistics and Tele-Informatics, in the framework of 6th International Conference on Hybrid Artificial Intelligence Systems HAIS 2011 (Wroclaw, Poland).
- **Co-chair**, with Profs. Emil Petre (University of Craiova, Romania), Sergiu Caraman (“Lower Danube” University of Galati, Romania) and Dan Selisteanu (University of Craiova, Romania), of the **Special Session** on Intelligent Techniques in Modelling, Identification and Control of Bioprocesses, in the framework of 3rd International Conference on Intelligent Decision Technologies KES-IDT-2011 (Piraeus, Greece).

Session Chairman / Co-chairman in Academic Conferences
(<http://www.aut.upt.ro/~rprecup/chair.html>):

- **26th Mediterranean Conference on Control and Automation MED’18** (Zadar, Croatia), 2017 IEEE Conference on Evolving and Adaptive Intelligent Systems EAIS 2017 (Ljubljana, Slovenia), XIII International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2016 (Nis, Serbia), **2014 IEEE Multi-Conference on Systems and Control MSC 2014** (Antibes, France), IEEE International Conference on Cybernetics CYBCONF 2013 (Lausanne, Switzerland), **18th World Congress of International Federation of Automatic Control IFAC 2011** (Milano, Italy), 15th Online World Conference on Soft Computing in Industrial Applications WSC15, Xth Triennial International SAUM Conference on Systems, Automatic Control and Measurements SAUM 2010 (Nis, Serbia), 11th International Conference on Intelligent Engineering Systems INES 2007 (Budapest, Hungary), Third IFAC Workshop on Advanced Fuzzy and Neural Control AFNC 07 (Valenciennes, France), 4th IFAC Conference on Management and Control of Production and Logistics IFAC MCPL 2007 (Sibiu, Romania), **16th World Congress of International Federation of Automatic Control IFAC 2005** (Prague, Czech Republic), 6th International Conference “Control of Power Systems’04”, (Strbske Pleso, High Tatras, Slovakia), 3rd International Conference on Global Research and Education in Intelligent Systems INTER-ACADEMIA 2004 (Budapest, Hungary), **14th World Congress of International Federation of Automatic Control IFAC’99** (Beijing, China), Fourth IFAC Conference on System Structure and Control SSC’97 (Bucharest, Romania), Second Conference on Applications of Fuzzy Systems ICAFS’96 (Siegen, Germany), and other conferences organized in Romania.

Other Appreciations of the Scientific Activity:

- Member of 16 habilitation boards (<http://www.aut.upt.ro/~rprecup/habcom.html>): chairman of the habilitation board of the candidate Dr. Ing. Zsofia Lendek, with the habilitation thesis “Takagi-Sugeno model-based design for switching systems and local stabilization” in the field of Systems Engineering, defended at the Technical University of Cluj-Napoca in 2019, chairman of the habilitation board of the candidate Dr. Ing. Constantin-Florin Căruntu, with the habilitation thesis “Advanced control strategies for networked / distributed systems” in the field of Systems Engineering, defended at the “Gheorghe Asachi” Technical University of Iasi in 2019, member of the habilitation board of the candidate Dr. Ing. Florin Stoican, with the habilitation thesis “Set-theoretic methods in control. Applications to fault tolerant control and motion planning” in the field of Systems Engineering, defended at the Politehnica University of Bucharest in 2018, chairman of the

habilitation board of the candidate Dr. Ing. Gheorghe Dorin Şendrescu, with the habilitation thesis “Identification and Control Techniques for Nonlinear Systems” in the field of Systems Engineering, defended at the University of Craiova in 2018, chairman of the habilitaton board of the candidate Dr. Ing. Monica Roman, with the habilitation thesis “Contributions to modelling, simulation and control of chemical reactions based processes” in the field of Systems Engineering, defended at the University of Craiova in 2018, chairman of the habilitation board of the candidate Dr. Ing. Silviu-Corneliu Folea, with the habilitation thesis “Wireless sensors and embedded systems in process control” in the field of Systems Engineering, defended at the Technical University of Cluj-Napoca in 2017, chairman of the habilitation board of the candidate Dr. Ing. Vlad Mureşan, with the habilitation thesis “Scientific achievements in the field of modeling, simulation and control of industrial processes” in the field of Systems Engineering, defended at the Technical University of Cluj-Napoca in 2017, chairman of the habilitation board of the candidate Dr. Ing. Marius Cioca, with the habilitation thesis “Research and results in systems engineering” in the field of Systems Engineering, defended at the University of Petrosani in 2017, chairman of the habilitation board of the candidate Dr. Ing. Ion-Lucian Buşoniu, with the habilitation thesis “Optimistic planning for nonlinear optimal control and networked systems” in the field of Systems Engineering, defended at the Technical University of Cluj-Napoca in 2015, chairman of the habilitation board of the candidate Dr. Ion Necoară, with the habilitation thesis “Coordinate descent methods for sparse optimization: Engineering applications” in the field of Systems Engineering, defended at the Politehnica University of Bucharest in 2014, member of the habilitation board of the candidate Dr. Ing. Dan Selişteanu, with the habilitation thesis “Research and achievements in modelling and control of bioprocesses” in the field of Systems Engineering, defended at the University of Craiova in 2016, member of the habilitation board of the candidate Dr. Ing. Monica Drăgoicea, with the habilitation thesis “Advances in service systems engineering: a modelling and simulation approach” in the field of Systems Engineering, defended at the Politehnica University of Bucharest in 2016, member of the habilitation board of the candidate Dr. Ing. Ciprian Gabriel Lupu, with the habilitation thesis “Methods, structures and strategies for the design and hardware and software implementation of real-time control systems for SISO and MIMO nonlinear processes” in the field of Systems Engineering, defended at the Politehnica University of Bucharest in 2016, member of the habilitation board of the candidate Dr. Ing. Eva-Henrietta Dulf, with the habilitation thesis “Advanced approaches dedicated to control of non-conventional processes” in the field of Systems Engineering, defended at the Technical University of Cluj-Napoca in 2015, member of the habilitation board of the candidate Dr. Ing. Constantin-Bălă Zamfirescu, with the habilitation thesis “Advances in engineering social-cyber-physical systems” in the field of Computers and Information Technology, defended at the “Lucian Blaga” University of Sibiu in 2015, member of the habilitation board of the candidate Dr. Ing. Monica Leba, with the habilitation thesis “Computers for control: from industrial processes to innovative systems” in the field of Systems Engineering, defended at the University of Craiova in 2015.

- Member of doctoral committees as a referee of 60 doctoral theses in Australia, Belgium, France, Italy, Norway and Romania (<http://www.aut.upt.ro/~rprecup/doctcom.html>): “Development of advanced autonomous learning algorithms for modeling and controlling nonlinear dynamical systems”, defended by Md Meftahul Ferdays, University of New South Wales (UNSW), Canberra, Australia, 2019 (supervisors: Dr. Sreenatha G. Anavatti, UNSW, Canberra, Australia, Dr. Matthew A. Garratt, UNSW, Canberra, Australia, and Dr. Mahardhika Prathama, Nanyang Technological University (NTU), Singapore), “Model predictive control based on sliding mode control”, defended by Miodrag D. Spasić, Norwegian University of Science and Technology (NTNU), Trondheim, Norway, 2019 (supervisors: Prof.Dr. Morten Hovd and Prof.Dr. Dragan Antić), “Diagnosis of a Wind Turbine Using Wireless Sensor Networks”, defended by Lavinius Ioan Gliga, Universite de Rouen Normandie, France, 2019 (supervisors: Prof.Dr. Hocine Chafouk and Prof.Dr.-Ing. Dumitru Popescu), “Contributions to modelling and control in urban intelligent transportation systems”, defended by Vlad Ion Constantinescu, Politehnica University of Bucharest, Romania, 2019 (supervisor: Prof.Dr.-Ing. Cristian Oară), “Accident reporting and guidance system based on mobile terminals”, defended by Alexandra Maria Pop, Technical University of Cluj-Napoca, 2019 (supervisor: Prof.Dr.-Ing. Honoriu Vălean), “A distributed system based on mobile terminals for monitoring environmental conditions”, defended by Adela Puşcaşiu, Technical University of Cluj-Napoca, 2019 (supervisor: Prof.Dr.-Ing. Honoriu Vălean), “Performant algorithms for image and signal processing”, defended

by Bogdan Popa, University of Craiova, Romania, 2019 (supervisor: Prof.Dr.-Ing. Dan Popescu), “Contributions to mobile communications in automotive control systems”, defended by Alexandra-Elisabeta Lörincz, University of Craiova, Romania, 2019 (supervisor: Prof.Dr.-Ing. Dan Selişteanu), “Modelling and advanced control techniques for multibody systems”, defended by Marius-Simion Costandin, Technical University of Cluj-Napoca, Romania, 2019 (supervisor: Prof.Dr.-Ing. Petru Dobra), “Autonomous Navigation Strategies for UGVs/UAVs”, defended by Mac Thi Thoa, Ghent University, Belgium, 2018 (supervisors: Prof.Dr.Ir. Clara M. Ionescu and Dr.Ir. Cosmin Copot), “Robust and optimal control theory for algebraic dynamical systems”, defended by Sebastian Florin Tudor, Politehnica University of Bucharest, Romania, 2018 (supervisor: Prof.Dr.-Ing. Cristian Oară), “Advanced control strategies for wastewater treatment plants”, defended by Laurențiu Luca, “Lower Danube” University of Galati, Romania, 2018 (supervisor: Prof.Dr.-Ing. Sergiu Caraman), “Automatic synthesis of control components for cyber-physical systems”, defended by Attila Ors Kilyen, Technical University of Cluj-Napoca, 2018 (supervisor: Prof.Dr.-Ing. Tiberiu Stefan Leția), “Strategies of control systems against hail”, defended by Ioan Porumb, Technical University of Cluj-Napoca, 2018 (supervisor: Prof.Dr.-Ing. Clement Feștilă), “Port-Hamiltonian systems identification”, defended by Silviu Octavian Medianu, Universite Grenoble Alpes, France, 2017 (supervisors: Prof.Dr. Laurent Lefevre and Prof.Dr.-Ing. Dumitru Popescu), “Factorisation techniques for generalised control systems”, defended by George Cristian Flutur, Politehnica University of Bucharest, 2017 (supervisor: Prof.Dr.-Ing. Cristian Oară), “Research concerning the security of automatic systems”, defended by Emil Precup, Oil & Gas University of Ploiesti, Romania, 2017 (supervisor: Prof.Dr.-Ing. Nicolae Paraschiv), “Applications of predictive control”, defended by Andreea-Valentina Șoimu, University of Craiova, Romania, 2016 (supervisor: Prof.Dr.-Ing. Vladimir Răsvan), “Control techniques for electrical drives in automotive applications”, defended by Sabin-Constantin Carpiuc, “Gheorghe Asachi” Technical University of Iasi, Romania, 2015 (supervisor: Prof.Dr.-Ing. Corneliu Lazăr), “Automatic control applications in medicine”, defended by Ciprian Sandu, Politehnica University of Bucharest, 2015 (supervisor: Prof.Dr.-Ing. Dumitru Popescu), “Contributions to the development of hierarchical intelligent systems”, defended by Tudor-Ion Buzdugan, Technical University of Cluj-Napoca, Romania, 2015 (supervisor: Prof.Dr.-Ing. Clement Feștilă), “Solutions for control of optomechatronics processes applied to biomedicine”, defended by Corina Anca Mnerie, Politehnica University of Timisoara, 2015 (supervisor: Prof.Dr.-Ing. Stefan Preitl), “Multi-objective methodologies for vehicles ride quality enhancing”, defended by Stefano Bottelli, Politecnico di Milano, Italy, 2014 (supervisor: Prof.Dr. Sergio M. Savaresi), “Analysis and design of advanced vehicle sharing systems: on-board technologies, control and optimization”, defended by Andrea Giovanni Bianchessi, Politecnico di Milano, Italy, 2014 (supervisor: Prof.Dr. Sergio M. Savaresi), “Model predictive control of energy efficient buildings in smart microgrids”, defended by Giancarlo Mantovani, Politecnico di Milano, Italy, 2014 (supervisor: Prof.Dr. Luca Ferrarini), “Analysis and design of energy-oriented driving assistance systems”, defended by Carlo Ongini, Politecnico di Milano, Italy, 2014 (supervisor: Prof.Dr. Sergio M. Savaresi), “Multi-model control for turbocharged Diesel engines”, defended by Silviu Cornel Cîrstoiu, Politehnica University of Bucharest, 2014 (supervisor: Prof.Dr.-Ing. Dumitru Popescu), “Simulator for the identification and control of dynamic systems”, defended by Silviu Medianu, Politehnica University of Bucharest, 2014 (supervisors: Prof.Dr.-Ing. Dumitru Popescu and Prof.Dr. Laurent Lefevre, Institut National Polytechnique de Grenoble, France), “Contributions to the development of control solutions dedicated to electrical driving systems with variable parameters and time-variable inputs”, defended by Alexandra-Iulia Stînean, Politehnica University of Timisoara, 2014 (supervisor: Prof.Dr.-Ing. Stefan Preitl), “Advanced control of micro aerial vehicles for civil applications”, defended by Ioan-Radu Morar, Technical University of Cluj-Napoca, Romania, 2014 (supervisor: Prof.Dr.-Ing. Ioan Nașcu), “Detection and diagnosis of faults of dynamical systems”, defended by Bogdan-Vasile Betea, Technical University of Cluj-Napoca, Romania, 2013 (supervisor: Prof.Dr.-Ing. Petru Dobra), “Digital control of DC-DC converters”, defended by Liviu-Bogdan Tomesc, Technical University of Cluj-Napoca, Romania, 2013 (supervisor: Prof.Dr.-Ing. Petru Dobra), “Stability and oscillations in hybrid systems”, defended by Lavinia Bejenaru, University of Craiova, Romania, 2013 (supervisor: Prof.Dr.-Ing. Vladimir Răsvan), “Contributions to modelling, simulation and control of eletro-thermal processes in closed industrial rooms”, defended by Andreea-Maria Neacă, University of Craiova, Romania, 2013 (supervisor: Prof.Dr.-Ing. Dan Popescu), “Advanced methods for nonlinear control of dynamical biotechnological processes”, defended by Elena Bunciu (Stanciu), University of Craiova,

Romania, 2013 (supervisor: Prof.Dr.-Ing. Emil Petre), “Contributions to monitoring and control of network data transmission”, defended by Roxana Stănică (Truică), University of Craiova, Romania, 2013 (supervisor: Prof.Dr.-Ing. Emil Petre), “Contributions to the development of control algorithms for brushless electrical drives with brushless DC motors applied to industrial robotic systems”, defended by Mirela Dobra, Technical University of Cluj-Napoca, Romania, 2013 (supervisor: Prof.Dr.-Ing. Gheorghe Lazea), “Contributions to nonlinear systems identification and control”, defended by Mihai Cornoiu, Politehnica University of Bucharest, Romania, 2012 (supervisors: Prof.Dr.-Ing. Dumitru Popescu and Prof.Dr. Pierre Borne, Ecole Centrale de Lille, France), “Contributions to robust control of wastewater biological treatment processes”, defended by Alina Chiroșcă, “Lower Danube” University of Galati, Romania, 2012 (supervisor: Prof.Dr.-Ing. Sergiu Caraman), “Methods of Internet frauds and informatics frauds countering”, defended by Mirela Enache, Technical University of Cluj-Napoca, Romania, 2012 (supervisor: Prof.Dr.-Ing. Tiberiu Stefan Leția), “Control of two biological processes of environmental interest (biological wastewater treatment and microalgae production in photobioreactor)”, defended by George-Adrian Ifrim, “Lower Danube” University of Galati, Romania, 2012 (supervisors: Prof.Dr.-Ing. Sergiu Caraman and Prof.Dr. Lionel Boillereaux, Nantes University, France), “Contributions to modeling and control of road traffic networks”, defended by Cătălin Dimon, Politehnica University of Bucharest, Romania, 2012 (supervisors: Prof.Dr.-Ing. Dumitru Popescu and Prof.Dr. Geneviève Dauphin-Tanguy, Ecole Centrale de Lille, France), “Control strategies for hybrid systems. Applications”, defended by Florin Stîngă, University of Craiova, Romania, 2012 (supervisor: Prof.Dr.-Ing. Dan Popescu), “Contributions to path planning algorithms for autonomous vehicles”, defended by István Szöke, Technical University of Cluj-Napoca, Romania, 2011 (supervisor: Prof.Dr.-Ing. Gheorghe Lazea), “Networked predictive control for fast processes”, defended by Constantin-Florin Căruntu, “Gh. Asachi” Technical University of Iasi, Romania, 2011 (supervisor: Prof.Dr.-Ing. Corneliu Lazăr), “Genetic programming techniques for nonlinear systems identification”, defended by Alina Patelli, “Gh. Asachi” Technical University of Iasi, Romania, 2011 (supervisor: Prof.Dr.-Ing. Octavian Păstrăvanu), “Optimal robust control of horizontal variable speed wind turbine”, defended by Andreea Pinteă, Politehnica University of Bucharest, Romania, 2011 (supervisors: Prof.Dr.-Ing. Dumitru Popescu and Prof.Dr. Pierre Borne, Ecole Centrale de Lille, France), “Distributed recognition system based on digital fingerprints”, defended by Radu Florin Miron, Technical University of Cluj-Napoca, Romania, 2011 (supervisor: Prof.Dr.-Ing. Tiberiu Stefan Leția), “Modern model-based control solutions applied to mechatronic systems”, defended by Claudia-Adina Dragoș, “Politehnica” University of Timisoara, Romania, 2011 (supervisor: Prof.Dr.-Ing. Stefan Preitl), “Monitoring and control systems for distributed systems applied to road traffic management”, defended by Theodor George Oprica, University of Craiova, 2011 (supervisor: Prof.Dr.-Ing. Matei Vinătoru), “Contributions to simultaneous localization and mapping of mobile robots”, defended by András László Majdik, Technical University of Cluj-Napoca, Romania, 2011 (supervisors: Prof.Dr.-Ing. Gheorghe Lazea and Prof.Dr. José A. Castellanos, University of Zaragoza, Spain), “Development of neuron-adaptive control algorithms”, defended by I. Bogdan Mureșan, Technical University of Cluj-Napoca, Romania, 2011 (supervisor: Prof.Dr.-Ing. Ioan Nașcu), “Advanced control algorithms applied to automatic control of wastewater treatment processes”, defended by Ruben Dan Crișan, Technical University of Cluj-Napoca, Romania, 2011 (supervisor: Prof.Dr.-Ing. Ioan Nașcu), “Contributions to the diagnosis of biological systems by electrographic methods”, defended by Vasiliță Voinea, Politehnica University of Bucharest, Romania, 2011 (supervisor: Prof.Dr.-Ing. Dumitru Popescu), “Surveillance and driving system of a hydro power dam equipped with radial gate and flap”, defended by Liliana Vasile, University of Craiova, Romania, 2010 (supervisor: Prof.Dr.-Ing. Vladimir Răsvan), “Usage of neural networks for fault diagnosis of nonlinear dynamic processes”, defended by Eugen Arinton, “Lower Danube” University of Galati, Romania, 2010 (supervisor: Prof.Dr.-Ing. Sergiu Caraman), “Adaptive control algorithms for friction dynamic systems”, defended by Radu-Constantin Zglimbea, University of Craiova, Romania, 2010 (supervisor: Prof.Dr.-Ing. Constantin Marin), “Distributed road traffic control”, defended by Mihai Hulea, Technical University of Cluj-Napoca, Romania, 2010 (supervisor: Prof.Dr.-Ing. Tiberiu Coloși), “Contributions to the analysis and development of fuzzy control systems applied to nonlinear process control”, defended by Marius-Lucian Tomescu, “Politehnica” University of Timisoara, Romania, 2008 (supervisor: Prof.Dr.-Ing. Stefan Preitl), “Evolutionary algorithms in automation”,

defended by Lavinia Eugenia Ferariu, “Gh. Asachi” Technical University of Iasi, Romania, 2004 (supervisor: Prof.Dr.-Ing. Mihail Voicu, corresponding member of Romanian Academy).

- Member of Doctor Honoris Causa title committees awarded to: Prof. Imre J. Rudas (awarded by “Politehnica” University of Timisoara in 2005), Acad. Prof. József Bokor (awarded by “Politehnica” University of Timisoara in 2007), Prof. Robin De Keyser (awarded by “Gh. Asachi” Technical University of Iasi in 2007), Prof. János Fodor (awarded by “Politehnica” University of Timisoara in 2010), Acad. Florin Gheorghe Filip (awarded by “Aurel Vlaicu” University of Arad in 2018), Prof. Hamido Fujita (chairman of the committee, title awarded by Politehnica University of Timisoara in 2018), Dr. Attila Michael Bilgic (chairman of the committee, title awarded by Politehnica University of Timisoara in 2018).

Long Term Academic Visits Abroad (Research and Teaching)
(<http://www.aut.upt.ro/~rprecup/visits.html>):

- February 2003: Invited Professor in France, Université de Savoie, École Supérieure d’Ingénieurs d’Annecy, LISTIC (research).
- November 2004-October 2009: Hungary, Budapest Tech Polytechnical Institution, John von Neumann Faculty of Informatics (research and teaching).
- April 1999-December 1999: Austria, Vienna University of Technology, Institute for Handling Devices and Robotics (teaching).
- July 2003-September 2005: Hungary, Budapest University of Technology and Economics, Department of Automation and Applied Informatics (research).

Cooperation with Academia and Industry (<http://www.aut.upt.ro/~rprecup/coop.html>):

- Hungarian Academy of Sciences, Budapest, Hungary, since 2008, cooperation with Prof. Péter Baranyi and his team in the area of tensor product model transformation.
- University of Ottawa, Canada, since 2007, cooperation with Prof. Emil M. Petriu and his team in the areas of soft computing and of signal processing.
- University of Ljubljana, Slovenia, since 2007, cooperation with Prof. Igor Škrjanc, Prof. Sašo Blažič and their teams in the field of fuzzy control systems.
- Coventry University, UK, since 2007, cooperation with Prof. Keith J. Burnham and his team in the areas of control systems and of system identification.
- Delft University of Technology, The Netherlands, since 2007, cooperation with Prof. Hans Hellendoorn and his team in the area of industrial applications of fuzzy control.
- Bremen University, Germany, since 2005, cooperation with Prof. Axel Gräser and his team in the areas of Iterative Feedback Tuning and of automotive control.
- Óbuda University (previously named Budapest Tech Polytechnical Institution, BMF), Budapest, Hungary, since 2003, cooperation with Prof. Imre J. Rudas, Prof. János Fodor and their team in the area of fuzzy systems.
- Budapest University of Technology and Economics (BME), Hungary, since 2003, cooperation with Acad. István Nagy, Prof. Péter Korondi and their teams in the area of control algorithms for mobile robots operating in Intelligent Space (Hashimoto Lab, University of Tokyo, Japan).
- Université de Savoie, France, since 2002, cooperation with Prof. Laurent Foulloy and his team in the area of fuzzy control systems.
- Crabel Capital Research, since 2005, in the area of systems modelling for financial applications.
- UCM Resita, since 1992, in the area of control algorithms for speed control of hydro-generators.

Citations (<http://www.aut.upt.ro/~rprecup/cita.html>):

- **6242 citations, Hirsch index (h-index) = 46 and Egghe index (g-index) = 66** according to Harzing, A.W. (2007) Publish or Perish, available from <http://www.harzing.com/pop.htm>, **6099 citations, h-index = 46 and i10-index = 118** according to Scholar Google, available from <http://scholar.google.com/citations?user=a43tQMQAAA&hl=en>, at March 12, 2020.
- **4294 citations in Scopus** articles of my 341 Scopus articles, **h-index = 38** according to Scopus, available from <http://www.scopus.com/authid/detail.url?authorId=56234853500>, at March 12, 2020.
- **3137 citations in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge)** articles of my 263 Clarivate Analytics Web of Science articles, **h-index = 36** according to Clarivate Analytics Web of Science, available from <http://www.researcherid.com/rid/A-6993-2009> transferred to <https://publons.com/researcher/1193864/radu-emil-precup/publications/>, at March 12, 2020.

- **h-index = 34** (self citations of all authors are excluded), **h-index = 33** (self citations of all authors are excluded) according to Scopus, **h-index = 27** (self citations of all authors are excluded) according to Clarivate Analytics Web of Science.
- **Cumulative Clarivate Analytics Web of Science (formerly ISI Web of Knowledge) impact factor (IF) of independent citations: 574.685, cumulative IF according to 2013 Journal Citation Reports (JCR) released by Clarivate Analytics in 2014: 623.687** (the IF of leader journals in my field is around 3).
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A) *Books* (<http://www.aut.upt.ro/~rprecup/books.html>):

- R.-E. Precup and R.-C. David, Nature-Inspired Optimization Algorithms for Fuzzy Controlled Servo Systems, **Butterworth-Heinemann, Elsevier**, Oxford, UK, 148 pp., 2019.
- R.-E. Precup, T. Kamal and S. Zulqadar Hassan, Eds., Advanced Control and Optimization Paradigms for Wind Energy Systems, Power Systems Series, **Springer** Singapore, Singapore, 257 pp., 2019.
- R.-E. Precup, T. Kamal and S. Zulqadar Hassan, Eds., Solar Photovoltaic Power Plants - Advanced Control and Optimization Techniques, Power Systems Series, **Springer** Singapore, Singapore, 250 pp., 2019.
- R.-E. Precup, Sz. Kovács, St. Preitl and E. M. Petriu, Eds., Applied Computational Intelligence in Engineering and Information Technology, the first book in the new Springer-Verlag series on Topics in Intelligent Engineering and Informatics (Editors-in-Chief: I. J. Rudas and J. Fodor), **Springer-Verlag**, Berlin, Heidelberg, New York, 356 pp., 2012.
- A. Kovács, R.-E. Precup, B. Paláncz and L. Kovács, Modern Numerical Methods in Engineering (in English), Editura Politehnica Publishers, Timisoara, 482 pp., 2012.
- St. Preitl, R.-E. Precup and Zs. Preitl, Process Control Structures and Algorithms, vol. 1 (in Romanian: Structuri si algoritmi pentru conducerea automata a proceselor, vol. 1), Editura Orizonturi Universitare Publishers, Timisoara, 214 pp., 2009.
- St. Preitl, R.-E. Precup and Zs. Preitl, Process Control Structures and Algorithms, vol. 2 (in Romanian: Structuri si algoritmi pentru conducerea automata a proceselor, vol. 2), Editura Orizonturi Universitare Publishers, Timisoara, 272 pp., 2009.
- St. Preitl and R.-E. Precup, Eds., Design Techniques for Automatic Control Structures. Applications (in Romanian: Tehnici de proiectare a structurilor de reglare automata. Aplicatii), Editura Orizonturi Universitare Publishers, 107 pp., 2008.
- R.-E. Precup, Computer Assisted Mathematics. Algorithms (in Romanian: Matematici asistate de calculator. Algoritmuri), Editura Orizonturi Universitare Publishers, 231 pp., 2007.
- St. Preitl and R.-E. Precup, Eds., Controllers for Servo Systems: Design Methods (in Romanian: Regulatele pentru servosisteme: metode de proiectare), Editura Orizonturi Universitare Publishers, Timisoara, 128 pp., 2007.
- St. Preitl and R.-E. Precup, Elements of Automatic Control. Applications to Voltage and Speed Control Systems of Synchronous Generators (in Romanian: Elemente de reglare automata. Aplicatii la sistemele de reglare automata a excitatiei si vitezei generatoarelor sincrone), Editura Orizonturi Universitare Publishers, Timisoara, 304 pp., 2005.
- R.-E. Precup, L. Dragomir and I. Bulavitchi, Computer Assisted Mathematics. Applications (in Romanian: Matematici asistate de calculator. Aplicatii), Editura Politehnica Publishers, Timisoara, 298 pp., 2002.
- St. Preitl and R.-E. Precup, Introduction to Control Engineering (in Romanian: Introducere in ingineria reglarilor automate), Editura Politehnica Publishers, Timisoara, 334 pp., 2001.
- St. Preitl and R.-E. Precup, Automatic Control (in Romanian: Automatizari), Editura Orizonturi Universitare Publishers, Timisoara, 206 pp., 2001.
- R.-E. Precup, Solutions for Fuzzy Control of Non-minimum Phase Systems. Applications to Hydrogenerators Control (in Romanian: Solutii de conducere fuzzy a sistemelor cu faza neminima. Aplicatii la conducerea hidrogenatoarelor), Editura Orizonturi Universitare Publishers, Timisoara, 124 pp., 2000.
- St. Preitl and R.-E. Precup, Elements of Methodics of Teaching Courses of Automation and Computer Science (in Romanian: Elemente de metodica predarii disciplinelor de automata si calculatoare), Editura Orizonturi Universitare Publishers, Timisoara, 144 pp., 1999.
- R.-E. Precup, and St. Preitl, Fuzzy Controllers (in English), Editura Orizonturi Universitare Publishers, Timisoara, 212 pp., 1999.
- St. Preitl and R.-E. Precup, Introduction to Fuzzy Control (in Romanian: Introducere in conducerea fuzzy a proceselor), Editura Tehnica Publishers, Bucharest, 151 pp., 1997.

B) *Book chapters* (<http://www.aut.upt.ro/~rprecup/bookch.html>):

- R.-C. David, R.-E. Precup, St. Preitl, A.-I. Szedlak-Stînean and L.-O. Fedorovici, Application of grey wolf optimization in fuzzy controller tuning for servo systems, Chapter 13 in *Swarm Intelligence - Volume 2: Innovation, new algorithms and methods*, Y. Tan, Ed. (IET Digital Library), pp. 363-387, 2018.
- R.-E. Precup and R.-C. David, Nature-Inspired Optimization of Fuzzy Controllers and Fuzzy Models, Chapter 20 in *Handbook on Computational Intelligence*, P. P. Angelov, Ed., World Scientific, Singapore, Volume 2: Evolutionary Computation, Hybrid Systems, and Applications, pp. 697-729, 2016.
- St. Preitl, R.-E. Precup, Zs. Preitl, A.-I. Stînean, C.-A. Dragoş and M.-B. Rădac, Pragmatic Design Methods Using Adaptive Controller Structures for Mechatronic Applications with Variable Parameters and Working Conditions, in: *Complex Systems*, G. M. Dimirovski, Ed., Studies in Systems, Decision and Control, vol. 55 (Springer International Publishing), pp. 619-647, 2016.
- R.-E. Precup, E.-I. Voişan, E. M. Petriu, M.-B. Rădac and L.-O. Fedorovici, Gravitational Search Algorithm-Based Evolving Fuzzy Models of a Nonlinear Process, in: *Informatics in Control, Automation and Robotics*, J. Filipe, K. Madani, O. Gusikhin and J. Sasiadek, Eds., Lecture Notes in Electrical Engineering, vol. 383 (Springer International Publishing), pp. 51-62, 2016.
- R.-C. Roman, M.-B. Rădac, R.-E. Precup and E. M. Petriu, Virtual Reference Feedback Tuning of MIMO Data-Driven Model-Free Adaptive Control Algorithms, in: *Technological Innovation for Cyber-Physical Systems*, L. M. Camarinha-Matos, A. J. Falcão, N. Vafaei and S. Najdi, Eds., IFIP Advances in Information and Communication Technology, vol. 470 (Springer International Publishing), pp. 253-260, 2016.
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- St. Preitl, R.-E. Precup, Z. Preitl, A.-I. Stînean, M.-B. Rădac and C.-A. Dragoş, Control Algorithms for Plants Operating Under Variable Conditions, Applications, in: *Advances in Soft Computing, Intelligent Robotics and Control*, J. Fodor and R. Fuller, Eds., Topics in Intelligent Engineering and Informatics, vol. 8 (Springer-Verlag), pp. 3-39, 2014.
- R.-C. David, R.-B. Grad, R.-E. Precup, M.-B. Rădac, C.-A. Dragoş and E. M. Petriu, An Approach to Fuzzy Modeling of Anti-lock Braking Systems, in: *Soft Computing in Industrial Applications*, V. Snáşel, P. Krömer, M. Köppen and G. Schaefer, Eds., Advances in Intelligent Systems and Computing, vol. 223 (Springer-Verlag), pp. 83-93, 2014.
- A.-I. Stînean, St. Preitl, R.-E. Precup, C.-A. Dragoş and M.-B. Rădac, Classical and Fuzzy Approaches to 2-DOF Control Solutions for BLDC-m Drives, in: *Intelligent Systems: Models and Applications*, E. Pap, Ed., Topics in Intelligent Engineering and Informatics, vol. 3 (Springer-Verlag), pp. 175-193, 2013.
- R.-E. Precup, F.-C. Enache, M.-B. Rădac, E. M. Petriu, St. Preitl and C.-A. Dragoş, Lead-Lag Controller-Based Iterative Learning Control Algorithms for 3D Crane Systems, in: *Aspects of Computational Intelligence: Theory and Applications*, L. Madarász and J. Živčák, Eds., Topics in Intelligent Engineering and Informatics, vol. 2 (Springer-Verlag), pp. 25-38, 2013.
- St. Preitl, A.-I. Stînean, R.-E. Precup, C.-A. Dragoş and M.-B. Rădac, 2-DOF and Fuzzy Control Extensions of Symmetrical Optimum Design Method: Applications and Perspectives, in: *Applied Computational Intelligence in Engineering and Information Technology*, R.-E. Precup, Sz. Kovács, St. Preitl and E. M. Petriu, Eds., Topics in Intelligent Engineering and Informatics, vol. 1 (Springer-Verlag), pp. 19-37, 2012.
- R.-C. David, R.-E. Precup, St. Preitl, J. K. Tar and J. Fodor, Three Evolutionary Optimization Algorithms in PI Controller Tuning, in: *Applied Computational Intelligence in Engineering and Information Technology*, R.-E. Precup, Sz. Kovács, St. Preitl and E. M. Petriu, Eds., Topics in Intelligent Engineering and Informatics, vol. 1 (Springer-Verlag), pp. 95-106, 2012.
- Cl. Pozna and R.-E. Precup, Ideas on a Pattern of Human Knowledge, in: *Applied Computational Intelligence in Engineering and Information Technology*, R.-E. Precup, Sz. Kovács, St. Preitl and E. M. Petriu, Eds., Topics in Intelligent Engineering and Informatics, vol. 1 (Springer-Verlag), pp. 273-286, 2012.

- C.-A. Dragoş, St. Preitl, R.-E. Precup and E. M. Petriu, Points of View on Magnetic Levitation System Laboratory-Based Control Education, in: Human-Computer Systems Interaction: Backgrounds and Applications 2, Part 2, Z. S. Hippe, J. L. Kulikowski and T. Mroczek, Eds., Advances in Intelligent and Soft Computing, vol. 99 (Springer-Verlag), pp. 261-275, 2012.
- R.-E. Precup, S. V. Spătaru, M.-B. Rădac, E. M. Petriu, St. Preitl, C.-A. Dragoş and R.-C. David, Experimental Results of Model-Based Fuzzy Control Solutions for a Laboratory Antilock Braking System, in: Human-Computer Systems Interaction: Backgrounds and Applications 2, Part 2, Z. S. Hippe, J. L. Kulikowski and T. Mroczek, Eds., Advances in Intelligent and Soft Computing, vol. 99 (Springer-Verlag), pp. 223-234, 2012.
- L.-O. Fedorovici, R.-E. Precup, R.-C. David and F. Drăgan, GSA-Based Training of Convolutional Neural Networks for OCR Applications, in: Computational Intelligence Systems in Industrial Engineering, C. Kahraman, Ed., Atlantis Computational Intelligence Systems, vol. 6 (Atlantis Press and Springer-Verlag), pp. 481-504, 2012.
- R.-E. Precup, R.-C. David, St. Preitl, E. M. Petriu and J. K. Tar, Optimal Control Systems with Reduced Parametric Sensitivity Based on Particle Swarm Optimization and Simulated Annealing, in: Intelligent Computational Optimization in Engineering Techniques and Applications, M. Köppen, G. Schaefer and A. Abraham, Eds., Studies in Computational Intelligence, vol. 366 (Springer-Verlag), pp. 177-207, 2011.
- R.-E. Precup, R.-C. David, E. M. Petriu, St. Preitl and A. S. Paul, Gravitational Search Algorithm-Based Tuning of Fuzzy Control Systems with a Reduced Parametric Sensitivity, in: Soft Computing in Industrial Applications, A. Gaspar-Cunha, R. Takahashi, G. Schaefer and L. Costa, Eds., Advances in Intelligent and Soft Computing, vol. 96 (Springer-Verlag), pp. 141-150, 2011.
- M.-B. Rădac, R.-E. Precup, E. M. Petriu, St. Preitl and C.-A. Dragoş, Convergent Iterative Feedback Tuning of State Feedback-Controlled Servo Systems, in: Informatics in Control Automation and Robotics, J. Andrade Cetto, J. Filipe and J.-L. Ferrier, Eds., Lecture Notes in Electrical Engineering, vol. 85 (Springer-Verlag), pp. 99-111, 2011.
- C.-A. Dragoş, St. Preitl, R.-E. Precup, M. Creţiu and J. Fodor, Modern Control Solutions with Applications in Mechatronic Systems, in: Computational Intelligence in Engineering, I. J. Rudas, J. Fodor and J. Kacprzyk, Eds., Studies in Computational Intelligence, vol. 313 (Springer-Verlag), pp. 87-102, 2010.
- St. Preitl, R.-E. Precup, M. L. Tomescu, M.-B. Rădac, E. M. Petriu and C.-A. Dragoş, Model-Based Design Issues in Fuzzy Logic Control, in: Towards Intelligent Engineering and Information Technology, I. J. Rudas, J. Fodor and J. Kacprzyk, Eds., Studies in Computational Intelligence, vol. 243 (Springer-Verlag), pp. 137-152, 2009.
- R.-E. Precup, M.-B. Rădac, St. Preitl, E. M. Petriu and C.-A. Dragoş, Iterative Feedback Tuning in Linear and Fuzzy Control Systems, in: Towards Intelligent Engineering and Information Technology, I. J. Rudas, J. Fodor and J. Kacprzyk, Eds., Studies in Computational Intelligence, vol. 243 (Springer-Verlag), pp. 179-192, 2009.
- Cl. Pozna, R.-E. Precup, St. Preitl, F. Troester and J. K. Tar, Points of View on Building an Intelligent Robot, in: Towards Intelligent Engineering and Information Technology, I. J. Rudas, J. Fodor and J. Kacprzyk, Eds., Studies in Computational Intelligence, vol. 243 (Springer-Verlag), pp. 263-277, 2009.
- R.-E. Precup and St. Preitl, On the Stability and Sensitivity Analysis of Fuzzy Control Systems for Servo-Systems, in: Fuzzy Systems Engineering, Theory and Practice, N. Nedjah and L. de Macedo Mourelle, Eds., Studies in Fuzziness and Soft Computing, vol. 181 (Springer-Verlag), pp. 131-161, 2005.
- St. Preitl and R.-E. Precup, Fuzzy Controllers with Dynamics, a Systematic Design Approach, in: Advances in Automatic Control, M. Voicu, Ed., The Springer International Series in Engineering and Computer Science, vol. 754 (Kluwer Academic Publishers and Springer-Verlag), pp. 283-296, 2003.

C) *Papers in Clarivate Analytics Web of Science (formerly ISI Web of Knowledge) journals*
(<http://www.aut.upt.ro/~rprecup/isijournals.html>):

- R.-E. Precup and H. Hellendoorn, A survey on industrial applications of fuzzy control, **Computers in Industry** (Elsevier Science), vol. 62, no. 3, pp. 213-226, 2011, impact factor (IF) = 1.529, IF according to 2018 Journal Citation Reports (JCR) released by Clarivate Analytics in 2019 = 4.769,

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- St. Preitl and R.-E. Precup, Comparison of Three State Feedback Controllers. Why Fuzzy Control ?, Proceedings of Second European Congress on Intelligent Technologies and Soft Computing EUFIT'94, H.-J. Zimmermann, Ed. (Verlag der Augustinus Buchhandlung), Aachen, Germany, vol. 3, pp. 1383-1387, 1994.
- R.-E. Precup and St. Preitl, Fuzzy Controller Equivalent to the Digital PID Predictor Controller, Proceedings of Second European Congress on Intelligent Technologies and Soft Computing EUFIT'94, H.-J. Zimmermann, Ed. (Verlag der Augustinus Buchhandlung), Aachen, Germany, vol. 2, pp. 968-971, 1994.
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- R.-E. Precup and St. Preitl, Fuzzy Control of an Electrohydraulic Servosystem under Nonlinearity Constraints, Proceedings of **First European Congress on Fuzzy and Intelligent Technologies EUFIT'93**, H.-J. Zimmermann, Ed. (Verlag der Augustinus Buchhandlung), Aachen, Germany, vol. 3, pp. 1524-1530, 1993.
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- St. Preitl and R.-E. Precup, Aspects Concerning Tuning and Implementation of Some Controllers and Control Algorithms for Speed Control of Hydrogenerators in Hydroelectric Power Stations, Proceedings of "Automation'92" Conference, Budapest, Hungary, vol. 3, pp. 504-513, 1992.

RESEARCH GRANTS AND CONTRACTS OF RADU-EMIL PRECUP (SHORT VERSION)

<http://www.aut.upt.ro/~rprecup/contracts.html>

- 2018-2019: principal investigator, IMproving the PREdiction of opinion dynamics in temporal Social networks: Mathematical modeling and Simulation framework (IMPRESS), 38245 EUR, national postdoctoral research project (PD, UEFISCDI), director: Lect. Dr. Alexandru Topirceanu, Politehnica University of Timisoara (UPT).
- 2018-2019: principal investigator, NONlinear OBServers-based control structures applied to MEChatronics Systems (NOBSMECS), 47207 EUR, national postdoctoral research project (PD, UEFISCDI), director: Lect. Dr. Alexandra-Iulia Szedlak-Stinean, UPT.
- 2014-2017: director of the UPT partner, Advanced control systems for bioprocesses in food industry (ADCOSBIO), 238637 EUR, national joint applied research project (PCCA, Executive Agency for Higher Education, Research, Development and Innovation Funding - UEFISCDI), director: Prof. Dan Selisteanu, University of Craiova.
- 2014-2017: director of the UPT partner, Advanced control system of a biorefinery plant (BIOCON), 284091 EUR, national joint applied research project (PCCA, UEFISCDI), director: Prof. Sergiu Caraman, "Lower Danube" University of Galati.
- 2015-2017: principal investigator, Learning techniques for improving control systems performance using model-free approaches (LTIPerforM), 83114 EUR, national research Young Teams grant (TE, UEFISCDI), director: Lect. Dr. Mircea-Bogdan Radac, UPT.
- 2014-2017: principal investigator, Experimental model for an automatic capacitive compensator designed for improving the power factor and for load balancing in low-voltage electricity distribution networks (CAEREDJT), 235102 EUR, national joint applied research project (PCCA, UEFISCDI), director: Assoc. Prof. Adrian Pana, UPT.
- 2012-2016: director of the UPT partner, Software products based on artificial intelligence algorithms applied to modelling and optimization of chemical systems (AISoftChim), 362903 EUR, national joint applied research project (PCCA, UEFISCDI), director, Prof. Silvia Curteanu, "Gheorghe Asachi" Technical University of Iasi.
- 2011-2016: director, New performance improvement techniques of control systems using experiment-based tuning, 339907 EUR, national exploratory research grant (PCE, UEFISCDI).
- 2008-2009: director of the Romanian partner, UPT, New results in development and applications of fuzzy control systems, 16000 EUR, international research contract (bilateral project Slovenia-Romania, CNMP), Prof. Igor Škrjanc, director of the Slovenian partner, University of Ljubljana.
- 2008-2009: principal investigator, Integration of Iterative Learning Control (ILC) and fuzzy methods in intelligent control systems, 16000 EUR, international research contract (bilateral project Hungary-Romania, CNMP), Prof. Stefan Preitl, director of the Romanian partner, UPT, Prof. János Fodor, director of the Hungarian partner, Budapest Tech Polytechnical Institution.
- 2006-2007: principal investigator, Analysis and development of intelligent systems, 16000 EUR, international research contract (bilateral project Hungary-Romania, Romanian Ministry of Research), Prof. Stefan Preitl, director of the Romanian partner, UPT, Prof. János Fodor, director of the Hungarian partner, Budapest Tech Polytechnical Institution.
- 2003-2005: principal investigator, Nonlinear systems and control in the field of power electronics, 16000 EUR, international research contract (bilateral project Hungary-Romania, Romanian Ministry of Research), Prof. Stefan Preitl, director of the Romanian partner, UPT, Acad. István Nagy, director of the Hungarian partner, Budapest University of Technology and Economics.
- 2008-2011: director of the UPT partner, Real-time informatics technologies for embedded-system-control of power-train in automotive design and applications (SICONA), 500000 EUR, national research contract (CNMP), director, Prof. Corneliu Lazar, "Gheorghe Asachi" Technical University of Iasi.
- 2009-2011: principal investigator, Research concerning new cognitive systems based on experimenting causal relations, 250000 EUR, national research contract (CNCSIS), director, Assoc. Prof. Claudiu Pozna, Transilvania University of Brasov.
- 2009-2011: principal investigator, Research concerning the design and implementation of modern solutions for information security in distributed systems, SCADA, DCS and remote control applied to gas distribution, 65000 EUR, national research contract (CNCSIS), director, Prof. Ioan Silea, UPT.

2007-2010: principal investigator, Integrated real-time networked control systems (SICOTIR), 500000 EUR, national research contract (CNMP), director, Prof. Cosmin Ionete, University of Craiova.

2007-2008: principal investigator, Analysis and development of intelligent control systems with fuzzy controllers dedicated to servo systems, 35000 EUR, national research contract (CNCSIS), director, Prof. Stefan Preitl, UPT.

2006-2007: director, Development of new fuzzy controller structures for embedded systems using Iterative Feedback Tuning algorithms, 18000 EUR, national research contract (CNCSIS).

2004-2005: director, Development of new fuzzy controller structures based on sensitivity theory, 15000 EUR, national research contract (CNCSIS).

2004-2005: principal investigator, Development of new control structures and controller development methods for positioning systems, 12000 EUR, national research contract (CNCSIS), director, Prof. Stefan Preitl, UPT.

2001: director, Research concerning the development of new stability analysis methods for a class of fuzzy control systems applied to the development of Takagi-Sugeno fuzzy controllers, 1400 USD, national research contract (CNCSIS).

2001: principal investigator, Research concerning the development of new robustness analysis methods for fuzzy control systems based on the parametric sensitivity analysis, 1500 USD, national research contract (CNCSIS), director, Prof. Stefan Preitl, UPT.

2000: principal investigator, Research concerning the development of new stability analysis methods for fuzzy control systems applied to power systems processes, 2000 USD, national research contract (CNCSIS), director, Prof. Stefan Preitl, UPT.

1998-1999: principal investigator, Research concerning the development of new control structures and controller development methods for variable inertia drives, 11000 USD, national research contract (CNCSU, CNCSIS), director, Prof. Stefan Preitl, UPT.

1998-2001: principal investigator, Intelligent process control systems, 170000 USD, national research contract (CNCSIS, World Bank), director, Prof. Ioan Dumitrache, corresponding member of Romanian Academy, Politehnica University of Bucharest.

1998-2001: principal investigator, Transient and voltage stability in power systems, 50000 USD, national research contract (CNCSIS, World Bank), director, Prof. Stefan Kilyeni, UPT.

1996-1997: principal investigator, Research concerning the development of control strategies for synchronous generators based on fuzzy set theory, 3500 USD, national research contract (CNCSU), director, Prof. Stefan Preitl, UPT.

1996: director, Research concerning the implementation of fuzzy control algorithms dedicated to electro-hydraulic and eletromechanical servo systems, 2000 USD, national research contract (CNCSU).

1996: principal investigator, Fuzzy control structures with dynamics and fuzzy-based parameter adaptation dedicated to control of nonminimum phase systems, 2700 USD, national research contract (Romanian Academy), director, Prof. Stefan Preitl, UPT.

1995: principal investigator, Development of control strategies and structures, and controllers applied to hydrogenerator control, 2000 USD, national research contract (CNCSU), director, Prof. Stefan Preitl, UPT.

1993: principal investigator, Development of control algorithms based on fuzzy set theory, 1000 USD, national research contract (Romanian Ministry of Education), director, Prof. Stefan Preitl, UPT.

1993: principal investigator, Control systems structures for small and medium power hydrogenerators, models and structures for applications, 1000 USD, national research contract (Romanian Ministry of Education), director, Prof. Toma-Leonida Dragomir, UPT.

SUPERVISION OF DIPLOMA, M.SC. AND B.SC. THESES

<http://www.aut.upt.ro/~rprecup/theses.html>

The following students have defended their diploma, M.Sc. and B.Sc. theses under my supervision at the Faculty of Automation and Computers, Politehnica University of Timisoara, Romania:

- 2019: Ion Panfilii, “Comparative analysis of training algorithms for neural networks” (in Romanian: “Analiza comparativa a unor algoritmi de invatare pentru retele neuronale”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman. Daniel Turcian, “Speed control system for electrical vehicles” (in Romanian: “Sistem de reglare a vitezei unor autovehicule electrice”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman. Mădălina Marinescu, “Automatic extraction of variables and functions of software projects in a company” (in Romanian: “Extragerea automata a variabilelor si a functiilor aferente arhitecturilor software ale proiectelor din cadrul unei firme”), diploma thesis in Automation and Applied Informatics, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman. Ligia-Izabela Crăciunescu, “Approaches do reduce the number of intersections of components of software projects in a company” (in Romanian: “Abordari de reducere a numarului de intersectii dintre componentele arhitecturilor software ale proiectelor din cadrul unei firme”), diploma thesis in Automation and Applied Informatics, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman. Veronica-Stefania Călușeru, “Application for testing by automatic detection of functionalities of dashboard instrumentation” (in Romanian: “Aplicatie de testare prin detectie automata a functionalitatilor instrumentelor de bord”), diploma thesis in Automation and Applied Informatics, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman. Alexandru-Marian Chiru, “Sensor-based object height control” (in Romanian: “Reglarea automata a inaltimii unui obiect pe baza de senzori”), diploma thesis in Automation and Applied Informatics, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman.
- 2018: Alina Coita, “Backtracking search optimization algorithm applied to the optimal tuning of DC motor controllers”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman. Costel Nicușor Todiručă, “CAN communication protocol using Arduino” (in Romanian: “Protocolul CAN de comunicare utilizand Arduino”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman. Paul-Sebastian Stanciu, “PSO-GSA and PSO-GWO metaheuristic algorithms for the optimal tuning of the parameters of a fuzzy controller” (in Romanian: “Algoritmi metaeuristici PSO-GSA si PSO-GWO pentru acordarea optima a parametrilor unui regulator fuzzy”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman. Andrei Drăgănescu, “WOA and PSO metaheuristic algorithms for benchmark-type optimization problems” (in Romanian: “Algoritmi metaeuristici WOA si PSO pentru probleme de optimizare de tip benchmark”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman. Raul-Florin Volentir, “Disabled people pedestrian assistance system using convolutional neural networks” (in Romanian: “Sistem de asistenta pietonala a persoanelor cu dizabilitati folosind retele neuronale artificiale cu harti de convolutie”), diploma thesis in Automation and Applied Informatics, co-supervisor: Assist. Lect. Dr.-Ing. Raul-Cristian Roman.
- 2017: Cristina Ursu, “Applications of automatic testing of airbag systems” (in Romanian: “Aplicatii de testare automata a sistemelor de airbag”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services. Bogdan Onode, “Platform for development and testing of driving dynamics on electric cars” (in Romanian: “Platforma de dezvoltare si testare a dinamicii condusului pe masini electrice”), diploma thesis in Automation and Applied Informatics (AAI), co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Elisabeta Maria Vânătu, “Design of the semi-automatic mounting station and automatic testing of the ASM Remote Control C8 mechanism” (in Romanian: “Proiectarea statiei semiautomate de montaj si verificarea automata a mecanismului ASM Remote Control C8”), diploma thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș.
- 2016: Iulia Lascu, “Functional safety mechanisms in advanced driving assistant systems” (in Romanian: “Mecanisme de siguranta functionala in sisteme avansate de asistenta a conducerii automobilului”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services.

- 2015: Teodor-Adrian Teban, “Analysis of myoelectric signal from hand arm segment using neural network models”, M.Sc. thesis in Automotive Embedded Software. Delia Ioana Ursulică, “Control algorithms for a self-balancing robot” (in Romanian: “Algoritmi de reglare pentru un robot de tip balansor”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Marius-Csaba Sabău, “Using a biologically inspired optimization algorithm in the fuzzy modeling of a car pressure monitoring sensor” (in Romanian: “Utilizarea unui algoritm de optimizare de inspirație biologică în modelarea fuzzy a unui senzor de monitorizare a presiunii într-un autovehicul”), M.Sc. thesis in Automatic Systems Engineering. Angel-Daniel Leucuș, “Matlab implementation of applications concerning evolving fuzzy systems” (in Romanian: “Implementarea în Matlab a unor aplicații privind modele fuzzy evolutive”), M.Sc. thesis in Automatic Systems Engineering. Camelia Jivan, “Unified diagnostic services used in customer diagnosis module for airbag ECU”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Ioana Dragomir, “Model-based development in the automotive field using Matlab Simulink” (in Romanian: “Dezvoltare bazată pe modele folosind Matlab Simulink în domeniul autovehiculelor”), M.Sc. thesis in Automatic Systems Engineering.
- 2014: Adrian-Călin Muntean, “Fuzzy control systems for liquid level control in a multi-tank laboratory equipment” (in Romanian: “Sisteme de reglare fuzzy pentru reglarea nivelului lichidului din echipamentul de laborator de tip sistem multirezervor”), M.Sc. thesis in Automatic Systems Engineering. Adrian-Alexandru Leipnik, “Vehicle blind spot detection using GMR sensors”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Alexandra-Dina Balint, “Backtracking Search Optimization algorithm applied to the optimal tuning of parameters of the controllers for a DC motor” (in Romanian: “Algoritm de tip Backtracking Search Optimization aplicat în acordarea optimă a parametrilor reglatoarelor pentru un motor de curent continuu”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Andrei-Alexandru Crețu, “An application for information processing in a data warehouse” (in Romanian: “Aplicație de prelucrare a datelor aferente depozitelor de date”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Andrei Șimonea, “Test environment for devices with sound functionalities”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Gabriel Glișa, “Instrument cluster Android application”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. George-Cosmin Moroșan, “Applications based on radar systems in the automotive industry”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Lavinia Popescu, “Quality assurance of software product in the banking sector” (in Romanian: “Asigurarea calității produselor software în domeniul bancar”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Marinela-Nicoleta Faur, “Modern and innovative solution to help physicians and patients” (in Romanian: “Soluție modernă și inovativă pentru sistemul medical”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Oana-Georgeta Lungu, “Analysis of software engineers perceptions on project management practices” (in Romanian: “Analiza percepțiilor inginerilor software asupra practicilor de management al proiectelor”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services, co-supervisor: Lect. Dr. Katarzyna Musiał-Gabrys (King’s College London, UK). Raul-Cristian Roman, “Control structures based on model-free adaptive control and model-free control. Applications to a two-rotor system aerodynamic system laboratory equipment” (in Romanian: “Structuri de reglare bazate pe model-free adaptive control și model-free control. Aplicații pe un echipament de laborator de tip sistem aerodinamic cu două rotoare”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Silviu Ursulescu, “Evolving fuzzy models for a laboratory equipment” (in Romanian: “Dezvoltarea unor modele fuzzy evolutive pentru un echipament de laborator”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Adrian-Marius Petcu, “Development of a fuzzy automaton dedicated to the control of mobile robots” (in Romanian: “Dezvoltarea unui automat fuzzy dedicat conducerii roboților mobili”), diploma thesis in Automation and Applied Informatics (AAI). Carmen-Elvira Gîrbaci, “Control solutions for a tower crane laboratory equipment” (in Romanian: “Soluții de reglare pentru un echipament de laborator de tip macara turn”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Emanuel

Sandu, “Theoretical and experimental study related to a quadcopter model” (in Romanian: “Studiu teoretic si experimental relativ la un model de quadcopter”), B.Sc. thesis in AAI, co-supervisors: Prof. Dr.-Ing. Stefan Preitl and Lect. Dr.-Ing. Claudia-Adina Dragoş. Iulia Lascu, “Automatic evaluation of tests for a rain and light sensor in the automotive industry” (in Romanian: “Evaluarea automata a testelor pentru un senzor de ploaie si lumina in industria automotive”), B.Sc. thesis in AAI. Nicoleta-Ştefania Gilcă, “An application for the automatic generation of project management plans” (in Romanian: “Aplicatie de generare automata a planurilor de management ale proiectelor”), B.Sc. thesis in AAI. Patricia Beatrice Secoşan, “Development of fuzzy controllers dedicated to the liquid level control in a multi-tank system laboratory equipment” (in Romanian: “Dezvoltarea unor regulatoare fuzzy dedicate reglării nivelului lichidului din cadrul unui echipament de laborator de tip sistem multirezervor”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Patricia Roxana Trandafir, “Biologically inspired algorithms in the optimal tuning of the parameters of the fuzzy models for a magnetic levitation laboratory equipment” (in Romanian: “Algoritmi de inspiratie biologica in acordarea optimala a parametrilor modelelor fuzzy pentru un echipament de laborator cu levitatie magnetica”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoş. Silvia Vlad, “Biologically inspired algorithms in the optimal tuning of the parameters of the fuzzy models for an ABS laboratory equipment” (in Romanian: “Algoritmi de inspiratie biologica in acordarea optimala a parametrilor modelelor fuzzy pentru un echipament de laborator de tip ABS”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoş. Sorin-George Marişcaş, “Biologically inspired algorithms in the optimal tuning of the parameters of the fuzzy models for a pendulum-cart laboratory equipment” (in Romanian: “Algoritmi de inspiratie biologica in acordarea optimala a parametrilor modelelor fuzzy pentru un echipament de laborator de tip pendul-carucior”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoş.

- 2013: Andrei-Leonard Borza, “Bacterial Foraging Optimization algorithm implementation in the optimal control of an automotive torque motor actuator”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Bogdan-Alexandru Bigher, “Tire pressure filling assistant modelling application”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Bogdan Gligor, “Occupant state detection system in passenger cars”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoş. Dan Cristian Bota, “Fractional controller tuning for engine control systems with lambda control”, M.Sc. thesis in Automotive Embedded Software, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoş. Daniel Ion Poenaru, “Integrated software application for sensor data processing” (in Romanian: “Aplicatie software integrata pentru prelucrarea datelor senzoriale”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Gheorghe-Bogdan Sopt, “Design for Six Sigma (DFSS) applied to automotive”, M.Sc. thesis in Automotive Embedded Software. Mircea-Pavel Cociuba, “Measuring the amplitude and phase of an analog signal using a digital signal processor” (in Romanian: “Masurarea amplitudinii si fazei unui semnal analogic utilizand un procesor de semnal”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services. Lucian-Alin Muntean, “Implementation of a Reinforcement Learning application” (in Romanian: “Implementarea unei aplicatii de Reinforcement Learning”), M.Sc. thesis in Automatic Systems Engineering. Angel-Daniel Leucuş, “Matlab implementation of applications concerning evolving fuzzy models” (in Romanian: “Implementarea in Matlab a unor aplicatii privind modele fuzzy evolutive”), B.Sc. thesis in Automation and Applied Informatics (AAI), co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoş. Ioana Dragomir, “Tuning of controllers for an aerodynamic system using Iterative Feedback Tuning” (in Romanian: “Acordarea regulatoarelor pentru un sistem aerodinamic folosind Iterative Feedback Tuning”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Vasile Rodilă, “Fuzzy controllers for a multi-tank laboratory equipment” (in Romanian: “Regulatoare fuzzy pentru un echipament de laborator de tip sistem multirezervor”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Alina-Cristina Antonie, “Automatic control of an aerodynamic system using Iterative Learning Control” (in Romanian: “Reglarea automata a unui sistem aerodinamic folosind Iterative Learning Control”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Carina Seridiuc, “Data control and receiver system for “surround view” cameras in the automotive industry” (in Romanian: “Sistem de control si receptie a datelor pentru camerele “surround view” in industria auto”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoş. Marius-Csaba Sabău, “Implementation of a Particle Swarm Optimization algorithm in the fuzzy modeling of a laboratory equipment” (in Romanian:

“Implementarea unui algoritm Particle Swarm Optimization in modelarea fuzzy a unui echipament de laborator”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Simona Sgaverdea, “Type-2 fuzzy sets. Matlab applications” (in Romanian: “Multimi fuzzy de tip 2. Aplicatii in Matlab”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș.

- 2012: Mădălin Adam, “Biologically inspired optimization algorithm for fuzzy modeling of a modular servo-system laboratory equipment” (in Romanian: “Algoritm de optimizare de inspiratie biologica in modelarea fuzzy a unui echipament de laborator de tip servosistem modular”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Ilie-Alin Lita, “An airplane-helicopter hybrid UAV control system”, M.Sc. thesis in Automotive Embedded Software. Raul-Gherasim Bulzan, “Fuzzy modeling of a magnetic levitation laboratory equipment” (in Romanian: “Modelarea fuzzy a unui echipament de laborator cu levitatie magnetica”), co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. George-Gabriel Chilom, “Multiagent automotive and transportation applications using NetLogo”, M.Sc. thesis in Automotive Embedded Software. Cosmin Ciurlă, “Vehicle locating system using GPS and SMS”, M.Sc. thesis in Automotive Embedded Software. Deian Cosaș, “Load port remote control unit”, M.Sc. thesis in Automotive Embedded Software. Ioan-Ciprian Drăghiță, “Implementation and testing of OBD services for Diagnostic Communication Manager - AUTOSAR”, M.Sc. thesis in Automatic Systems Engineering. Florin-Cristian Enache, “Implementation and testing of UDS services for Diagnostic Communication Manager - AUTOSAR”, M.Sc. thesis in Automatic Systems Engineering. Horațiu-Ioan Filip, “Evolving fuzzy models for a laboratory pendulum-cart system” (in Romanian: “Modele fuzzy evolutive pentru un echipament de laborator de tip sistem pendul-carucior”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Ramona-Bianca Grad, “Biologically inspired optimization algorithm for fuzzy modeling of an Anti-lock Braking System laboratory equipment” (in Romanian: “Algoritm de optimizare de inspiratie biologica in modelarea fuzzy a unui echipament de laborator de tip Anti-lock Braking System”), M.Sc. thesis in Automatic Systems Engineering, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Paul-Andrei Ianc, “File system for SD card data storage” (in Romanian: “Sistem de fisiere pentru stocare de date pe SD card”), M.Sc. thesis in Automatic Systems Engineering. Andrei Kiss, “Wireless automotive communication”, M.Sc. thesis in Automotive Embedded Software. Ionuț-Iulian Movilă, “Mobile receipt scanner”, M.Sc. thesis in Automotive Embedded Software. Diana Pîrlea, “UDS based off-board diagnostic subsystem for an instrument cluster”, M.Sc. thesis in Automatic Systems Engineering. Claudia Daniela Pop, “Automatic generation of unitary test cases for mathematical expressions”, M.Sc. thesis in Automatic Systems Engineering. Ion Sanda, “Speed controller for commercial vehicles” (in Romanian: “Regulator de viteza pentru vehicule comerciale”), M.Sc. thesis in Automatic Systems Engineering. Sandor-Laszlo Csiszar, “Automated testing of the high speed CAN protocol using Labview”, M.Sc. thesis in Automotive Embedded Software. Răzvan-Alexandru Achimescu, “Controller tuning solution using model-free control techniques. Applications to a modular servo-system laboratory equipment” (in Romanian: “Solutie de acordare a reguletoarelor utilizand tehnici de tip model-free control. Aplicatii pe un echipament de laborator de tip servosistem modular”), B.Sc. thesis in Automation and Applied Informatics (AAI), co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Marinela-Nicoleta Faur, “Control solutions with state feedback and PID controllers applied to a magnetic levitation laboratory equipment” (in Romanian: “Solutii de reglare automata cu reguletoare dupa stare si reguletoare PID aplicate pe un echipament de laborator cu levitatie magnetica”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Oana-Corina Ghergan, “Applications based on type-2 fuzzy sets” (in Romanian: “Aplicatii bazate pe multimi fuzzy de tip 2”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Norbert-Paul Hanzal, “Mobile robot position control application” (in Romanian: “Aplicatie de reglare a pozitiei unui robot mobil”), B.Sc. thesis in AAI, co-supervisor: Assist. Lect. Dipl.-Ing. Emil Voișan. Adrian-Călin Muntean, “Control algorithms for mobile robot trajectory tracking” (in Romanian: “Algoritmi de reglare pentru urmarirea traiectoriei robotilor mobili”), B.Sc. thesis in AAI. Raul-Cristian Roman, “IFT-based control structures. Applications to a twin rotor aero-dynamical system laboratory equipment” (in Romanian: “Structuri de reglare bazate pe Iterative Feedback Tuning. Aplicatii pe un echipament de laborator de tip sistem aerodinamic cu doua rotoare”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac.

- 2011: Laura-Teodora Dioanca, “Tensor product-based control techniques applied to the level control of the three-tank system” (in Romanian: “Tehnici de reglare bazate pe produs tensorial aplicate la reglarea nivelului sistemului cu trei rezervoare”), M.Sc. thesis in Automatic Systems Engineering. Emanuela-Alina Dragoș, “Applications of fuzzy automata to mobile robot control” (in Romanian: “Aplicatii ale automatelor fuzzy in conducerea robotilor mobili”), M.Sc. thesis in Automatic Systems Engineering. Marian Crețiu, “Control algorithms for a magnetic levitation laboratory equipment” (in Romanian: “Algoritmi de reglare pentru un echipament de laborator cu levitatie magnetica”), M.Sc. thesis in Automatic Systems Engineering. Pavel Borchescu, “Automatic testing of the pre-tensioning system” (in Romanian: “Testarea automata a sistemului de pretensionare”), M.Sc. thesis in Automatic Systems Engineering. Cosmin Borchescu, “Testing of data trouble codes in the airbag system” (in Romanian: “Testarea data trouble codes in sistemul de airbag”), M.Sc. thesis in Automatic Systems Engineering. Paul Caragea, “Application for embedded C code generation using a multi-agent system” (in Romanian: “Aplicatie pentru generarea de cod embedded C folosind un sistem multi-agent”), M.Sc. thesis in Automatic Systems Engineering. Sergiu-Ovidiu Gheju, “Filter models used in the automotive industry” (in Romanian: “Modele de filtre utilizate in industria automotiva”), M.Sc. thesis in Automatic Systems Engineering. Amadis-Aurelian Moț, “Facial expression recognition applications” (in Romanian: “Aplicatii de recunoastere a expresiilor faciale”), M.Sc. thesis in Automatic Systems Engineering. Paul-Radu Arjocu, “Traffic sign detection and recognition”, M.Sc. thesis in Automotive Embedded Software. Călin Dinel Ghiață, “LIN flashing application for an intelligent battery sensor”, M.Sc. thesis in Automotive Embedded Software. Ovidiu-Cristian Crișan, “Smartphone-based access to body control unit and tire pressure monitoring system”, M.Sc. thesis in Automotive Embedded Software. Adelin-Cristian Ardelean, “Continuous integration and continuous testing in automotive embedded software”, M.Sc. thesis in Automotive Embedded Software. Sorina Mocanu, “Software development of a module for testing SPI sensors used for crash simulation in vehicles”, M.Sc. thesis in Automotive Embedded Software. Nicolae Chedea, “CAN software interfaces”, M.Sc. thesis in Automotive Embedded Software. Elis Mariescu, “Feature extraction from PPM”, M.Sc. thesis in Automotive Embedded Software. George-Adrian Sas, “GDUM - A generic solution for data upload-download in compliance with off-board diagnostics standards KWP2000 and UDS”, M.Sc. thesis in Automotive Embedded Software. Alexandru-Vlad Dungă, “Automated testing of the diagnostic services in automotive applications using the KWP 2000 protocol”, M.Sc. thesis in Automotive Embedded Software. Cristina Bodi, “Improvements brought to flasher systems in automotive”, M.Sc. thesis in Automotive Embedded Software. Christian-Gabriel Glück, “Microcontroller based data acquisition and control system”, M.Sc. thesis in Automotive Embedded Software. Alin Bănuți, “Implementation of cluster validation applications” (in Romanian: “Implementarea unor aplicatii de validare a clusterelor”), M.Sc. thesis in Informatics Systems Applied to Manufacturing and Services. Adrian Vasile Cimponeriu and Adrian Tonică Băban, “ARM Cortex-M3-based design, construction and control of a three-link robotic arm” (in Romanian: “Proiectarea, constructia si controlul unui brat robotic cu trei segmente cu ajutorul platformei ARM Cortex-M3”), M.Sc. theses in Informatics Systems Applied to Manufacturing and Services. Bogdan-Alexandru Bigher, “Iterative Feedback Tuning-based control structures. Applications to a multi-tank system laboratory equipment” (in Romanian: “Structuri de reglare bazate pe Iterative Feedback Tuning. Aplicatii pe un echipament de laborator de tip sistem multirezervor”), B.Sc. thesis in Automation and Applied Informatics (AAI), co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Bogdan-Stefan Cerveneak, “Correlation-based tuning solution. Applications to a modular servo-system laboratory equipment” (in Romanian: “Solutie de acordare a reglatoarelor utilizand tehnici de corelatie. Aplicatii pe un echipament de laborator de tip servosistem modular”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Adrian Corneliu Chicin, “Cluster validation indices. Matlab applications” (in Romanian: “Indicatori de validare a clusterelor. Aplicatii in Matlab”), B.Sc. thesis in AAI. Lucian Alin Muntean, “Implementation of a Reinforcement Learning Application” (in Romanian: “Implementarea unei aplicatii de Reinforcement Learning”), B.Sc. thesis in AAI. Alexandru Ionel Simonescu, “Trajectory tracking algorithms for mobile robots” (in Romanian: “Algoritmi de urmarire a traiectoriei robotilor mobili”), B.Sc. thesis in AAI, Roxana Gheorghe, “Erbium-doped optical fiber amplifier applications” (in Romanian: “Aplicatii cu amplificatoare optice cu fibra dopata cu Erbiu”), diploma thesis in AAI.

- 2010: Lucia-Roxana Golea, “Modeling for the simulation and control of the primary system of ELSY lead cooled fast reactor”, M.Sc. thesis in Automatic Systems. Iulian Benea, “Quality driven by artificial intelligence”, M.Sc. thesis in Automotive Embedded Software. Ioana Lupea, “Gear shifting strategy for a double clutch transmission”, M.Sc. thesis in Automotive Embedded Software. Emanuel Jianu, “Graphical solutions for intelligent optical sensors” (in Romanian: “Solutii grafice pentru senzori optici inteligenti”), M.Sc. thesis in Automatic Systems. Cristian Laiu, “Automotive head lamp using power LEDs: A prototype design”, M.Sc. thesis in Automotive Embedded Software. Bogdan-Adrian Marcu, “Vehicle position and speed estimation system” (in Romanian: “Sistem de estimare a pozitiei si vitezei autovehiculelor”), M.Sc. thesis in Automatic Systems. Alina Loredana Trocan, “Controller tuning solutions using correlation techniques” (in Romanian: “Solutii de acordare a reguletoarelor utilizand tehnici de corelatie”), M.Sc. thesis in Automatic Systems. Sándor Biró, “Reinforcement Learning algorithms. Applications” (in Romanian: “Algoritmi de tip Reinforcement Learning. Aplicatii”), diploma thesis in Computer Engineering, co-supervisor: Assoc. Prof. Dr. Doru Todinca (Department of Computer Science and Engineering, “Politehnica” University of Timisoara, Romania). Ramona-Bianca Grad: “Virtual Reference Feedback Tuning techniques. Applications to a modular servo-system laboratory equipment” (in Romanian: “Tehnici de tip Virtual Reference Feedback Tuning. Aplicatii pe un echipament de laborator de tip servosistem modular”), B.Sc. thesis in Automation and Applied Informatics (AAI), co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Radu Toma, “Speed control solutions for an electrical drive laboratory equipment” (in Romanian: “Solutii de reglare a turatiei unei actionari electrice”), B.Sc. thesis in AAI. Paul Andrei Ianc, “Fuzzy control solutions based on linear matrix inequalities. Applications to a modular servo-system laboratory equipment” (in Romanian: “Solutii de reglare fuzzy bazate pe inegalitati matriceale liniare. Aplicatii pe un echipament de laborator de tip servosistem modular”), B.Sc. thesis in AAI. Horațiu-Ioan Filip, “Iterative Feedback Tuning-based control solutions. Applications to a laboratory pendulum-cart system” (in Romanian: “Structuri de reglare bazate pe Iterative Feedback Tuning. Aplicatii pe un echipament de laborator de tip sistem pendul-carucior”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Florin-Cristian Enache, “Iterative Learning Control-based control solutions. Applications to a 3D crane laboratory equipment” (in Romanian: “Structuri de reglare bazate pe Iterative Learning Control. Aplicatii pe un echipament de laborator de tip macara 3D”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Alin Moise Ienea, “Control solutions for a multi-tank system laboratory equipment” (in Romanian: “Solutii de reglare pentru un echipament de laborator de tip sistem multirezervor”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac.
- 2009: Adina Panu, “Applications of modeling business processes with Petri nets”, M.Sc. thesis in Automotive Embedded Software. Adrian Moț, “Wireless in automotive with IrDA technology: Electric window door”, M.Sc. thesis in Automotive Embedded Software. Cristian Mircea Goțiu, “Advanced diagnostics techniques in automotive embedded systems”, M.Sc. thesis in Automotive Embedded Software. Daniel Opreș, “Diagnosis tool for the truck tireguard system”, M.Sc. thesis in Automatic Systems. Ion Lupu, “Software for recursive and iterative generation of self-similar curves” (in Romanian: “Software de generare a unor curbe autosimilare in mod recursiv si iterativ”), M.Sc. thesis in Automatic Systems. Liana Luminița Raica, “Multi-agent-based nonlinear systems modelling” (in Romanian: “Modelarea unor sisteme neliniare intr-un mediu de dezvoltare a sistemelor multi-agent”), M.Sc. thesis in Automatic Systems. Patricia Diana Gudiu (Stupar), “Autocoding techniques for motor control in automotive applications”, M.Sc. thesis in Automatic Systems. Răzvan Trif, “Text-to-speech systems”, M.Sc. thesis in Automotive Embedded Software. Simina Bonea, “Bizonal climate simulation”, M.Sc. thesis in Automotive Embedded Software. Alin-Andrei Baștea, “Control solutions for a servo-system” (in Romanian: “Solutii de reglare pentru un servosistem”), diploma thesis in Automation and Applied Informatics (AAI). Bianca Marcu, “Road model and simulation visualization solution for automotive applications”, diploma thesis in AAI. Cătălin Daniel Danciu, “Identification and control problems for nonlinear systems using fuzzy Hammerstein models” (in Romanian: “Probleme de identificare si reglare a unor sisteme neliniare folosind modele fuzzy Hammerstein”), diploma thesis in AAI, co-supervisor: Prof. Dr.-Ing. Stefan Preitl. Cătălin Gavriliuță, “Iterative Learning Control techniques. Applications to inverted pendulum system control” (in Romanian: “Tehnici de tip Iterative Learning Control. Aplicatii in reglarea sistemului pendul invers”), diploma thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan

Rădac. Florin Mugurel Costa, “Hysteresis two-position temperature controller” (in Romanian: “Regulator numeric de temperatura bipozitional cu histerezis”), diploma thesis in AAI. Daniela Bărbulescu, “Control solutions for a 3D crane” (in Romanian: “Solutii de reglare pentru o macara 3D”), diploma thesis in AAI. Felician Blaga, “Automatic testing tool for electronic control units” (in Romanian: “Tool automat de testare pentru unitatile electronice de control”), diploma thesis in AAI. Ioan Moșincat, “Iterative Feedback Tuning techniques. Applications to three-tank system control” (in Romanian: “Tehnici de tip Iterative Feedback Tuning. Aplicatii in reglarea sistemului cu trei rezervoare”), diploma thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Marian-Constantin Bîrzava, “MIMO control solutions for a twin rotor aero-dynamical system” (in Romanian: “Solutii de reglare multivariabila pentru un sistem aerodinamic cu doua rotoare”), diploma thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Octavian Francisc Lupu, “Driver model and simulation visualization solution for automotive applications”, diploma thesis in AAI. Olimpiu Liviu Drăgan, “Control algorithms for a category of mobile robots” (in Romanian: “Algoritmi de reglare destinati unei categorii de roboti mobili”), diploma thesis in AAI, co-supervisor: Prof. Dr.-Ing. Stefan Preitl. Ramona Cristina Șorheț, “Development of a Matlab toolbox for econometric functions modelling” (in Romanian: “Dezvoltarea unui toolbox de modelare in Matlab a unor functii econometrice”), diploma thesis in AAI, co-supervisor: Prof. Dr.-Ing. Stefan Preitl. Sergiu Viorel Spătaru, “Control techniques based on linear matrix inequalities. Applications to a laboratory equipment” (in Romanian: “Tehnici de reglare bazate pe inegalitati matriciale liniare. Aplicatii pe un echipament de laborator”), diploma thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Laura-Teodora Dioanca, “Tensor product-based control techniques. Applications to a laboratory equipment” (in Romanian: “Tehnici de reglare bazate pe produs tensorial. Aplicatii pe un echipament de laborator”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Pavel Borchescu, “Model-based fuzzy control techniques. Applications to a laboratory equipment” (in Romanian: “Tehnici de reglare fuzzy bazate pe model. Aplicatii pe un echipament de laborator”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Mircea-Bogdan Rădac. Marian Crețiu, “Control solutions for a magnetic levitation system” (in Romanian: “Solutii de reglare pentru un sistem cu levitatie magnetica”), B.Sc. thesis in AAI, co-supervisor: Lect. Dr.-Ing. Claudia-Adina Dragoș. Cosmin Borchescu, “Iterative Regression Tuning techniques. Applications to a laboratory equipment” (in Romanian: “Tehnici de tip Iterative Regression Tuning. Aplicatii pe un echipament de laborator”), B.Sc. thesis in AAI. Constantin Silviu Dragu, “Control solutions for a laboratory three-tank system” (in Romanian: “Solutii de reglare pentru un sistem cu trei rezervoare”), B.Sc. thesis in AAI. Ciprian Ionel Panțoni, “SISO control solutions for a twin rotor aero-dynamical system” (in Romanian: “Solutii de reglare monovariabila pentru un sistem aerodinamic cu doua rotoare”), B.Sc. thesis in AAI. Călin Petru Daminescu, “Control solutions for the pendulum-cart system” (in Romanian: “Solutii de reglare pentru sistemul pendul-carucior”), B.Sc. thesis in AAI.

- 2008: Corina Ardelean (Blaj), “Research and development testbench for vehicle air conditioning systems”, M.Sc. thesis in Automatic Systems. Alina Loredana Trocan, “Development and implementation of controllers for a temperature and air stream control system” (in Romanian: “Dezvoltarea si implementarea unor regulatoare pentru un sistem de reglare automata a temperaturii si debitului de aer”), diploma thesis in Automation and Applied Informatics (AAI). Mircea-Bogdan Rădac, “ABS longitudinal wheel slip control solutions. Laboratory implementations” (in Romanian: “Solutii de reglare a alunecarii longitudinale a rotii in cadrul ABS. Implementari pe un echipament de laborator”), diploma thesis in AAI. Cătălin-Victor Vînt, “Control solutions for networked control systems” (in Romanian: “Solutii de reglare pentru sisteme de conducere in retea”), diploma thesis in AAI. Cella-Flavia Văcărescu, “Iterative Learning Control-based control solutions. Applications to control problems of the inverted pendulum system” (in Romanian: “Tehnici de tip Iterative Learning Control. Aplicatii in probleme de reglare a sistemului pendul invers”), diploma thesis in AAI. Ioana Zeni Faur, “Control solutions for an electrical driving system” (in Romanian: “Solutii de reglare pentru un sistem de actionare electrica”), diploma thesis in AAI. Lavinia Hrecin, “Development of linear and fuzzy controllers for speed control of an electrical drive” (in Romanian: “Dezvoltarea unor regulatoare liniare si fuzzy pentru reglarea turatiei unei actionari electrice”), diploma thesis in AAI. Monica-Hristina Traicu, “Development and implementation of controllers for a three-tank system” (in Romanian: “Dezvoltarea si implementarea unor regulatoare pentru un sistem cu trei rezervoare”), diploma thesis in AAI. Alin Lucian Stefan, “Implementation of an intelligent resource management

system for a building” (in Romanian: “Implementarea unui sistem de administrare inteligenta a resurelor unei cladiri”), diploma thesis in AAI.

- 2007: Lucia-Roxana Golea, “Locally-recurrent neural networks for nonlinear dynamic modeling”, diploma thesis in Automation and Applied Informatics (AAI), co-supervisor: Prof. Dr. Enrico Zio (Department of Nuclear Engineering, Polytechnic of Milan, Italy, now with the Chair on Systems Sciences and Energetic Challenges, Ecole Centrale Paris and Supelec, France). Mircea-Florian Lupu, “Modeling of human walking for rehabilitation purposes”, diploma thesis in AAI, co-supervisors: Prof. Dr.-Ing. Axel Gräser and Dr.-Ing. Danijela Ristić-Durrant (Institute of Automation, University of Bremen, Germany). Sorin Lușă, “Fuzzy control solutions for the three-tank system” (in Romanian: “Solutii de conducere fuzzy pentru sistemul cu trei rezervoare”), diploma thesis in AAI. Adrian Ionel Iacob, “Iterative Feedback Tuning techniques. Applications to inverted pendulum system control” (in Romanian: “Tehnici de tip Iterative Feedback Tuning. Aplicatii in reglarea sistemului pendul invers”), diploma thesis in AAI. Andreea Otilia Balogh, “Control system for a Coanda application” (in Romanian: “Sistem de reglare pentru o aplicatie Coanda”), diploma thesis in AAI, co-supervisor: Dipl.-Ing. Simona Vaivoda.
- 2006: Daniel Stefan Barbu, “Control problems of a class of mobile robots” (in Romanian: “Probleme de conducere asociate unei clase de roboti mobili”), M.Sc. thesis in Automatic Systems. Gelu Laurențiu Ioanăș, “Neural network-based modelling and adaptive control solutions applied to internal combustion motors” (in Romanian: “Solutii de modelare si reglare adaptiva aplicate motoarelor cu combustie interna folosind retele neurale”), M.Sc. thesis in Automatic Systems. Călin Aurelian Micu, “The ANFIS technique. Implementation. Applications” (in Romanian: “Tehnica ANFIS. Implementare. Aplicatii”), diploma thesis in Automation and Applied Informatics (AAI). Cristian Mircea Vasii, “Fuzzy predictive control solutions. Matlab-Simulink implemented applications” (in Romanian: “Solutii de conducere fuzzy predictiva. Aplicatii implementate in Matlab-Simulink”), diploma thesis in AAI. Oana Maria Mihuți, “Process control solutions based on neural networks” (in Romanian: “Solutii de conducere a proceselor bazate pe retele neurale”), diploma thesis in AAI, co-supervisor: Dipl.-Ing. Simona Gheju (Vaivoda). Ciprian Gheorghe Schneider, “Scilab applications” (in Romanian: “Aplicatii in Scilab”), diploma thesis in AAI, co-supervisor: Dipl.-Ing. Simona Gheju (Vaivoda).
- 2005: Ioana-Anamaria Buna, “Process fuzzy modelling and identification software” (in Romanian: “Software dedicat modelarii si identificarii fuzzy a unor procese”), M.Sc. thesis in Automatic Systems. Cristian Blaj, “Applications of predictive control solutions” (in Romanian: “Solutii de reglare automata cu predictie. Aplicatii”), M.Sc. thesis in Automatic Systems. Florin Spânu, “Software dedicated to the stability analysis of a class of fuzzy control systems” (in Romanian: “Software dedicat analizei stabilitatii unei clase de sisteme de reglare fuzzy”), M.Sc. thesis in Automatic Systems. Corina Ardelean, “Iterative Feedback Tuning technique applications to PID controllers” (in Romanian: “Aplicatii ale tehnicii Iterative Feedback Tuning in proiectarea reglatoarelor de tip PID”), diploma thesis in Automation and Applied Informatics (AAI), co-supervisors: Prof. Dr.-Ing. Axel Gräser and Dr.-Ing. Miroslav Mihajlov (Institute of Automation, University of Bremen, Germany). Laura Roxana Chetreanu, “Fuzzy control solutions for the inverted pendulum system” (in Romanian: “Solutii de conducere fuzzy pentru sistemul pendul invers”), diploma thesis in AAI.
- 2004: Marian Stan, “ABS control solutions” (in Romanian: “Solutii de conducere a ABS”), M.Sc. thesis in Automatic Systems. Bogdan Solga, “Software for the sensitivity analysis of fuzzy control systems” (in Romanian: “Software pentru analiza sensibilitatii sistemelor de reglare automata cu reglatoare fuzzy”), M.Sc. thesis in Automatic Systems. Csongor Szabó, “Control of nonholonomic vehicles, mobile manipulators”, diploma thesis in Automation and Industrial Informatics (AII), co-supervisor: Prof. Dr. habil. Péter Korondi (Department of Mechatronics, Optics and Mechanical Engineering Informatics, Budapest University of Technology and Economics, Hungary). Alexandru-Bogdan Năsălean, “Fuzzy control solutions for the three-tank system” (in Romanian: “Solutii de conducere pentru sistemul cu trei rezervoare”), diploma thesis in AII. Cristian Blaj, “Predictive control systems. Applications” (in Romanian: “Sisteme de reglare automata cu predictie. Aplicatii”), diploma thesis in AII. Călin Oltean, “Scilab toolbox dedicated to the developemtn of fuzzy control systems” (in Romanian: “Pachet de programe Scilab destinat dezvoltarii sistemelor de reglare fuzzy”), diploma thesis in AII. Ioana-Anamaria Buna, “Process fuzzy modelling and identification

- problems” (in Romanian: “Probleme de modelare si identificare fuzzy a unor procese”), diploma thesis in AII. Ion Păun, “Optimal control solutions for the inverted pendulum system” (in Romanian: “Solutii de reglare optimala pentru sistemul pendul invers”), diploma thesis in AII. Radu Balintoni, “Fuzzy control solutions for a variable load electrical driving system” (in Romanian: “Solutii de conducere fuzzy pentru un sistem de actionare electrica avand sarcina variabila”), diploma thesis in AII. Florin Spănu, “Sliding mode temperature control solutions” (in Romanian: “Solutii de reglare sliding mode a temperaturii unui proces termic”), diploma thesis in AII.
- 2003: Zsuzsa Preitl, “Algebraic controller design methods. Analysis and Matlab-Simulink programs” (in Romanian: “Metode algebrice de proiectare a reglatoarelor. Analiza si programe Matlab-Simulink”), M.Sc. thesis in Automatic Systems. Ion-Bogdan Ursache, “Temperature process control solutions” (in Romanian: “Solutii de reglare a temperaturii unui proces termic”), diploma thesis in Automation and Industrial Informatics (AII). Florian Radu Fărcaș, “Control solutions for a variable load electrical driving system” (in Romanian: “Solutii de conducere pentru un sistem de actionare electrica avand sarcina variabila”), diploma thesis in AII.
 - 2002: Gabriel Faur, “Program dedicated to the stability analysis of fuzzy control systems” (in Romanian: “Program pentru analiza sistemelor de reglare automate cu reglatoare fuzzy”), M.Sc. thesis in Automatic Systems. Zsuzsa Preitl, “Control algorithms based on the delta model of the plant”, diploma thesis in Automation and Industrial Informatics (AII), co-supervisors: Assoc. Prof. Dr. Ruth Bars (Department of Automation and Applied Informatics, Budapest University of Technology and Economics, Hungary) and Prof. Dr.-Ing. Robert Haber (Department of Plant and Process Engineering, University of Applied Science Cologne, Köln, Germany). Dragan Tosity, “VisSim set of programs for fuzzy controller development” (in Romanian: “Pachet de programe de dezvoltare a reglatoarelor fuzzy in cadrul mediului VisSim”), diploma thesis in AII. Onuț-Petru Drăgulete, “Development of vehicle cable testing programs” (in Romanian: “Dezvoltarea unor programe de testare a cablajelor automobilelor”), diploma thesis in AII. Claudiu Lungu: “Fuzzy control solutions for a three-tank system equipment” (in Romanian: “Solutii de conducere fuzzy pentru un echipament de tip sistem cu trei rezervoare”), diploma thesis in AII, co-supervisor: Prof. Dr. Levente Kovacs (now with the John von Neumann Faculty of Informatics, Obuda University, Budapest, Hungary). Adriana-Lidia Hațegan, “Scilab program package dedicated to the development of fuzzy controllers” (in Romanian: “Pachet de programe de dezvoltare a reglatoarelor fuzzy in cadrul mediului Scilab”), diploma thesis in AII. Valeriu-Cosmin Lolea, “Virtual laboratory with direct Internet connection and control of the inverted pendulum system” (in Romanian: “Laborator virtual cu conectare directa la Internet si conducerea sistemului pendul invers”), diploma thesis in AII. Lucian Nicolîță Cornean, “Linear-quadratic regulators dedicated to inverted pendulum system control” (in Romanian: “Reglatoare liniar-patratice destinate conducerii sistemului pendul invers”), diploma thesis in AII.
 - 2001: Corina-Anca Lamoș, “Development of Takagi-Sugeno fuzzy controllers” (in Romanian: “Dezvoltarea unor reglatoare fuzzy de tip Takagi-Sugeno”), M.Sc. thesis in Automatic Systems. Gabriel Faur, “Computer-assisted stability analysis of a class of fuzzy control systems” (in Romanian: “Analiza asistata de calculator a stabilitatii unei clase de sisteme de reglare fuzzy”), diploma thesis in Automation and Industrial Informatics (AII). Peter Baracsi, “Study concerning the fuzzy control system development software” (in Romanian: “Studiul unor medii de dezvoltare a sistemelor de conducere fuzzy”), diploma thesis in AII. Alin Nicula: “Optimal control solutions dedicated to the inverted pendulum system” (in Romanian: “Solutii de conducere optimala pentru sistemul pendul invers”), diploma thesis in AII. Vasile Potinteu: “Fuzzy control solutions dedicated to the inverted pendulum system” (in Romanian: “Solutii de conducere fuzzy pentru sistemul pendul invers”), diploma thesis in AII. Cosmin Cornea, “Temperature control applications using a microcontroller-based system” (in Romanian: “Aplicatii de conducere a unor procese termice cu un sistem cu microcontroller”), diploma thesis in AII, co-supervisors: Prof. Dr.-Ing. Stefan Preitl and Prof. Dr. Levente Kovacs (now with the John von Neumann Faculty of Informatics, Obuda University, Budapest, Hungary).
 - 1991-2000: More than 20 students with successfully defended diploma and M.Sc. theses.