

# **Europass Curriculum Vitae**

Personal information First name(s) / Surname(s) Address(es) Telephone(s) Fax(es) E-mail Nationality Date of birth

# POP, Horia Florin

Cluj-Napoca, Romania +40.264.405327 (office) +40.264.591.906 hfpop@cs.ubbcluj.ro, hfpop@hfpop.ro Romania April 20, 1968 Male

Gender

## **Desired employment Occupational field**

## Work experience

#### Dates

Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector

#### Dates

Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector

## Dates

Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector

#### Dates

Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector

## Dates

Occupation or position held Main activities and responsibilities Name and address of employer

October 1994 - September 1996 Asistant professor Didactic and research activity Babeş-Bolyai University, Faculty of Mathematics and Computer Science

Page 1/3 - Curriculum vitae of Horia F. POP

For more information on Europass go to http://europass.cedefop.europa.eu © European Union, 2004-2010 24082010

Since October 2006 PhD supervisor Research activity Babes-Bolyai University, Faculty of Mathematics and Computer Science

Professor of Computer Science, Babes-Bolyai University

Mobile:

Higher education Since February 2004 Profesor universitar

Didactic and research activity Babes-Bolyai University, Faculty of Mathematics and Computer Science Higher education

February 1998 - February 2004

Associate professor

Didactic and research activity Babeş-Bolyai University, Faculty of Mathematics and Computer Science Higher education

#### October 1996 - February 1998

Lecturer professor

Didactic and research activity Babes-Bolyai University, Faculty of Mathematics and Computer Science Higher education

#### Type of business or sector

Higher education

Dates Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector October 1991 – September 1994 Teaching assistant Didactic and research activity Babeş-Bolyai University, Faculty of Mathematics and Computer Science Higher education August 1991 – September 1991 Computer scientist Programs development and computer science research History Museum of Transylvania Computer Science

Dates Occupation or position held Main activities and responsibilities Name and address of employer Type of business or sector

#### **Education and training**

#### Dates

Title of qualification awarded Principal subjects/occupational skills covered Name and type of organisation providing education and training Level in national or international classification

Dates

Title of qualification awarded Principal subjects/occupational skills covered

Name and type of organisation providing education and training

Level in national or international classification

# Personal skills and competences

Mother tongue(s)

Other language(s) Self-assessment European level (\*) English

French

January 1992 – November 1995
Doctor in Mathematics, specialization Computer Science
Doctoral studies in artificial intelligence and soft computing

Babeş-Bolyai University, Faculty of Mathematics and Computer Science Public institution Doctoral studies ISECD Level 6

#### September 1987 – July 1991

B.Sc. Degree Diploma

Specialization Computer Science, lectures in the fields of Mathematics and Computer Science

Babeş-Bolyai University, Faculty of Mathematics and Computer Science Public institution Studii de licență ISECD Level 5

#### Romanian

Understanding Speaking Writing Listening Reading Spoken interaction Spoken production C2 Experienced user B2 Independent user B2 Independent user B2 Independent user (\*) Common European Framework of Reference for Languages

Social skills and competences

Capacity to adapt to multicultural environments, obtained via academic mobilities abroad

Organisational skills and competences	During 2004-2012 I was Vice-Dean of the Faculty of Mathematics and Computer Science During 2012-2016 I was the President of the UBB Senate Committee on Curriculum Since 2016 I have been the Vice-President of the UBB Senate Since 2012 I have been Director of the ITC Division of UBB During 1999-2000 I coordinated the team of translators for the translation from English to Romanian of a specialty volume	
Technical skills and competences		
Computer skills and competences	ECDL Examiner test, 2004	
Artistic skills and competences		
Other skills and competences	Translator license English-Romanian in Mathematics, Computer Science and Economical Sciences (1991)	
Driving licence	Category B	
Additional information	Hirsh index (ISI)11Hirsch index (Scopus)12Hirsch index (Google Scholar)12For other information please access the personal web site, at http://hfp	op.ro .

# Curriculum Vitae

#### Dr. Horia F. POP, Professor

# **General Data**

- April 20, 1968 Born in Cluj-Napoca, Romania; son of Florin POP, Professor, Technical University, Cluj-Napoca and Liana POP, Associate Professor, Technical University, Cluj-Napoca
- Office address Babeş-Bolyai University, Faculty of Mathematics and Computer Science, Department of Computer Science, Chair of Programming Languages and Methods, 1, M. Kogălniceanu St., RO-400084 Cluj-Napoca, Romania, Phone: +40.264.405.327, Fax: +40.264.591.906, E-mail address: hfpop@cs.ubbcluj.ro, hfpop@hfpop.ro, World Wide Web: http://hfpop.ro

Home address 1/29 Băița St., RO-400427 Cluj-Napoca, Romania, Phone: +40.364.265.142

## **Knowledge of international languages**

Romanian Speaks, reads and writes fluently

English Speaks, reads and writes fluently

French Speaks, reads and writes fluently

Spanish Reads, at satisfactory level

German Reads, at satisfactory level

#### Education

- 1992–1995 Ph.D. student at the Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca. Ph.D. Thesis "Intelligent Systems in Classification Problems". Doctor in Mathematics, speciality Computer Science, since November 3, 1995
- 1987–1991 Student at the Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca. Average final grade:
  9.86 (1–10 scale). Bachelor's Degree with maximum grade: 10 (Magna Cum Laudae), with the B.Sc. Thesis "Adaptive Prototypes in Fuzzy Clustering"
- 1986–1987 Military service
- 1978–1986 Secondary and high school at the "Emil Racoviță" High School of Mathemathics and Physics, Cluj-Napoca

1974–1978 Elementary school at the Pedagogical School, Cluj-Napoca

# **Other Distinctions**

June 2003 Tester Licence for ECLD tests (European Computer Driver Licence)

**October 1990** The Translation License from the Ministry of Culture of Romania, for translations from English into Romanian, in the fields of Mathematics-Computer Science-Cybernetics and Economical Sciences, with the grades of 9.00 and 9.50 respectively.

# Working Positions

July 6, 2009 - to date Ph.D. advisor at the Faculty of Computer Science, Eotvos-Lorand University, Budapest

- October 1, 2006 to date Ph.D. advisor at the Department of Computer Science, Faculty of Mathematics and Computer Science, Babeş-Bolyai University
- February 23, 2004 to date Professor at the Department of Computer Science, Faculty of Mathematics and Computer Science, Babeş-Bolyai University
- February 23, 1998 February 22, 2004 Associate Professor at the Department of Computer Science, Faculty of Mathematics and Computer Science, Babeş-Bolyai University
- October 1, 1996 February 22, 1998 Lecturer Professor at the Department of Computer Science, Faculty of Mathematics and Computer Science, Babeş-Bolyai University
- October 1, 1994 September 30, 1996 Assistant Professor at the Department of Computer Science, Faculty of Mathematics and Computer Science, Babeş-Bolyai University
- October 1, 1991 September 30, 1994 Teaching Assistant at the Department of Computer Science, Faculty of Mathematics and Computer Science, Babeş-Bolyai University
- August 15, 1991 September 30, 1991 Computer Scientist at the Computer Center of the History Museum of Transsylvania, Cluj-Napoca

## **Complementary Positions**

Since 2016 Vice-President of the Babeş-Bolyai University Senate

Since 2012 Director of the ITC Division of the Babeş-Bolyai University

2012–2016 President of the Babeş-Bolyai University Senate Committee on Curriculum

2004–2012 Vice-Dean of the Faculty of Mathematics and Computer Science, Babeş-Bolyai University

Since May 1, 2001 Executive Editor at the journal Studia Universitatis Babeş-Bolyai, Series Informatica

Since October 1, 1998 Expert of the National Council of the Academic Scientific Research

- October 1, 1997 September 30, 1998 Member of the Babeş-Bolyai University Organizing Commission and Professoral Council of the Faculty of Open (Inter-Disciplinary) Studies
- February 1, 1997 February 1, 2004 Member of the Babeş-Bolyai University Senate Commission for University Communication Network and Internet
- March 15, 1996 October 1, 1996 Editorial Assistant at the journal Studia Universitatis Babeş-Bolyai, Series Informatica
- October 1, 1995 September 30, 1999 Member of the Babeş-Bolyai University Communication Center
- April 15, 1993 February 1, 1997 Unix Network Administrator at the Department of Computer Science, Faculty of Mathematics and Computer Science, Babeş-Bolyai University

## Scientific Organizations Memberships

Since January 1, 2007 Member of AMS (American Mathematical Society)

Since October 1, 2006 Member of SSMR (Romanian Society of Mathematical Sciences)

Since January 30, 1997 Member of BISC (Berkeley Initiative in Soft Computing)

November 15, 1995 – October 30, 1998 Member of ACM (Association of Computing Machinery)

# **Editorial Activity**

Since September 1, 2011 Scientific reviewer of the "The Arabian Journal for Science and Engineering"

- Since September 10, 2010 Scientific reviewer of the Journal "Information Systems", published by Elsevier Publishers
- Since April 30, 2009 Scientific reviewer at the international journal "Advances of Fuzzy Systems", published by Hindawy Publishers and indexed by Scopus
- July 2–4, 2009 Co-editor of KEPT 2009 Conference Proceedings, Short Papers, Studia Universitatis Babes-Bolyai, Series Informatica, Special Issue, 2009, 370 pages
- September 2009 Co-editor of KEPT 2009 Conference Proceedings, Selected Papers, Cluj University Press, 2009, 400 pages
- Since October 8, 2007 Scientific reviewer at the international journal "Fuzzy Sets and Systems", published by Elsevier Publishers
- Since July 11, 2007 Scientific reviewer at "Computational Statistics and Data Analysis", published by Elsevier Publishers

June 6-8, 2007 Co-editor of KEPT 2007 Conference Proceedings, Cluj University Press, 2007, 400 pages

- Since April 20, 2005 Scientific reviewer at "Mathematical Reviews", a division of the American Mathematical Society
- Since September 12, 2002 Scientific reviewer at "Journal of Chemical Information and Computer Sciences", published by the American Chemical Society
- Since October 12, 2001 Scientific reviewer at "European Journal of Operational Research", published by Elsevier Publishers
- January, 1999 April, 2000 Coordinator of the translation team and coordonator of LATEX system usage for translating into Romanian and typesetting the book THOMAS H. CORMEN, CHARLES E. LEISERSON, RONALD L. RIVEST, *Introduction to Algorithms (Romanian)*, Computer Libris Agora Press, Cluj-Napoca, Romania, 2000, ISBN 973-97534-3-4, 881 pages

Since June 1, 1998 Scientific reviewer at "EnvironMetrics", an international journal published by John Wiley and Sons

# **Didactical Activity**

#### **Regular Didactical Activity**

During his activity at the Department of Computer Science of the Babeş-Bolyai University he has taught the following courses:

- "Computer Architecture and Operating Systems", course, seminars and practical works for the I-st year of study for short-term students
- "Mathematical Foundations of Computer Science", course and seminar for the I-st year of study for full-term students
- "Data Structures", course and seminar for the I-st year of study for full-term students
- "Fundamentals of Programming", course, seminars and practical works for the I-st year of study for full-term students
- "Computer Architecture and Operating Systems", practical works for the II-nd year of study for full-term students
- "Functional and Logic Programming", course and practical works for the II-nd year of study for full-term students
- "Artificial Intelligence", course and practical works for the III-rd year of study for full-term students
- "Windows Applications Programming", course and practical works for the III-rd year of study for full-term students
- "Constraints Satisfaction Programming", course and practical works for the II-nd year of study for full-term students
- "Internet Programming", course, seminars and practical works for master students
- "Parallel Logic Programming", course, seminars and practical works for master students
- "Intelligent Agents", course and seminars for master students
- "Advanced Metods in Data Analysis", course and seminars for master students
- "Simulation Languages", course and practical works for master students
- "Declarative Programming in Machine Learning", course and seminars for master students

#### **Other Didactical Participations**

- **1999** The course "Communication in Internet", at the postgraduate course "The Management of Electrical Installations at Consumers" (Romanian), organized by the Technical University of Cluj-Napoca, Romania
- **1997** The course "Internet and the access to information", at the postgraduate course "The Management of Lighting Installations" (Romanian), organized by the Technical University of Cluj-Napoca, Romania

# **Scientific Activity**

Main interest topics:

- Scientific Data Analysis (Fuzzy Sets, Soft Computing, Artificial Intelligence),
- Programming Metholodogies (Windows and Internet Programming, Functional and Logic Programming).

# **Participations at Romanian Programs**

#### **Coordination of Romanian Programs**

- 2012 2016 Principal investigator of the research project "System for management and intelligent analysis of medical data in order to improve response strategies for acute and chronic diseases", financially supported by the Romanian National Research Council under no. PN-II-PT-PCCA-2011-3.2-0917
- 2007 2010 Principal investigator of the research project "Robust Models and Methods for Data Processing with Applications in Natural Sciences", financially supported by the Romanian National University Research Council under no. IDEI 550/2007
- 2005 2008 Project coordinator from the Faculty of Mathematics and Computer Science, BBU Cluj, as participant to the excellency research grant no. PC-D11-PT00-147 "Novel Techniques in Nuclear Magnetic Resonance on Solids: Methodological Developments and Applications". The research project is coordinated by the Research Institute for Isotopical and Molecular Technologies, Cluj-Napoca

#### **Participations at Romanian Grants**

- 2007–2010 CRONIS Decision system based on multiagent techniques for the generation, optimization and management of the national registry of chronic non-transmisible diseases. Partners: Institute for Research, Design and Production of Automatisation Equipment and Installations Bucharest, Cluj Branch, Ion Chiricuță Oncological Institute of Cluj, Iuliu Hațieganu University of Medicine and Pharmacy of Cluj and Babes-Bolyai University of Cluj. Grant PNCDI II Partnerships No. 11-003/2007.
- **2006–2009** Contributions in the domain of multiagent systems using methods of cognitive psychology, interface agents and aspect oriented programming paradigm. Partners: Chair of Clinical Psychology and Psychotherapy, Chair of Psychology and Chair of Programming Languages and Methods from BBU. Grant 307248/2006, financed by the Babeş-Bolyai University.
- **2005–2007** Systems for collaborative decision aid in academic environments case study BBU. Grant TP 2/2005, financed by the Babeş-Bolyai University. Research grant coordinated by Prof. Ş. Niţchi.
- **2004–2007** Evolutionary computing: new paradigms, techniques and classes of evolutionary algorithms. Grant 23/322/2004, 23/322/2005, Contract between the Babeş-Bolyai University, Cluj-Napoca and the Minsitry of Education and Research. Research grant coordinated by Prof. D. Dumitrescu.
- **2001–2003** New methods of evolutionary computation. Applications in machine learning, evolutionary optimisation, scientific data analysis and natural language processing. Grant 34971/2001, 34971/2002, 34971/2003, Contract between the Babeş-Bolyai University, Cluj-Napoca and the Minsitry of Education and Research. Research grant coordinated by Prof. D. Dumitrescu.
- **1998** Modeling and implementation of a multidisciplinary algorithms database to create a high performance computing center (Romanian). Grant 193/1998 Contract between the "Babeş-Bolyai" University, Cluj-Napoca and the National Council of University Scientific Research, Ministry of Research and Technology. Research grant coordinated by Prof. Militon Frențiu.
- **1995–1997** Study for building a university computer network. Useful algorithms in the functioning of the university services network (Romanian). Grant 944/1996, 310/1997, Contract between the "Babeş-Bolyai" University, Cluj-Napoca and the Ministry of Education. Research grant coordinated by Prof. Militon Frențiu.

- **1994** Computer program for dimensioning the lighting installations of social, cultural and sports buildings (Romanian). Contract 115/1994 between the Buildings Technical University, Bucharest and the Ministry of Science and Technology, External collaborator. Research grant coordinated by Prof. Cornel Bianchi.
- 1993–1997 Ellaboration of models and algorithms for applications from different domains. New performant algorithms concerning problems of classification, simulation and reorganization of data (Romanian). Contract 1087B/1993, 3010/1994, B10/Grant 244/1995, Grant 943/1996, Grant 309/1997, Contract between the "Babeş-Bolyai" University, Cluj-Napoca and the Ministry of Education and Science Research grant coordinated by Prof. Militon Frentiu and Grigor Moldovan.
- **1992** Electrical energy distribution networks for the consumer (Romanian), Pop, F., Beu, D., and Pop, H. F. Contract No. 92F/1992 between the Technical University of Cluj-Napoca and the Ministry of Education and Science. 20 percent of the value of the contract are for the Department of Computer Science, "Babeş-Bolyai" University, Cluj-Napoca, representing some computer programs. Research grant coordinated by Prof. Florin Pop.
- **1988** Energetical balance sheet for "Mucart" Co. (Romanian), Pop, F., Filip, A., Moca, M., and Pop, H. F. Contract No. 96/1988 between the Technical University of Cluj-Napoca and "Mucart" Co. Research grant coordinated by Prof. Florin Pop.

#### **Participations at Schools and Seminars**

- October 6–10, 1998 Presentation "ActiveX" at the Advanced Educational Technologies Intensive Courses organized under the Tempus S-JEP 12518-97 program, with the participation of the "Petru Maior" University, Târgu Mures, Babeş-Bolyai University, Cluj-Napoca, Technical University of Cluj-Napoca, National College University of Ireland, Galway and National Technical University of Athens, Greece
- July 20–25, 1997 Advanced Summer School "Parallel and Distributed Computer Systems PARADIS '97", organized in Mangalia (Romania) by the "Politehnica" University of Bucharest, the Research Institute for Informatics Bucharest, the University of Marseille, and Glossy SA (Global Services and Systems) Bucharest, under the sponsorship of the Service Culturel of the Embassy of France in Romania, the Romanian National Commission for Informatics and the Romanian National Tempus Office
- August 1–5, 1994 Summer School "Computer Assisted Learning in the Field of Artificial Intelligence", organized in Bucharest by the Romanian Academy, Department of Science and Technology of Information, Center of Advanced Research in Automatic Learning, Natural Language Processing and Conceptual Modelling and the Instituto "Dalle Molle" from Lugano, Switzerland

#### Member of organizing and program committees

- May 22, 2010 Member of the Scientific Committee of the 26-th National Conference on Didactics of Mathematics, organised by the Romanian Mathematical Society and the Faculty of Mathematics and Computer Science, Babeş-Bolyai University, in Cavnic, Romania
- May 23, 2009 Member of the Scientific Committee of the 25-th National Conference on Didactics of Mathematics, organised by the Romanian Mathematical Society and the Faculty of Mathematics and Computer Science, Babeş-Bolyai University, in Turda, Romania
- April 19, 2008 Member of the Scientific Committee of the 24-th National Conference on Didactics of Mathematics, organised by the Romanian Mathematical Society and the Faculty of Mathematics and Computer Science, Babeş-Bolyai University

# **International Participations**

#### **Coordination of International Programs**

- **2005** Coordinator of the Babes-Bolyai University participation in the HEAT Project ("Higher-Education Applied Tools"), submitted to CCE for financial support as a FP6 STRPS project. The general coordinator of the project is prof. Laurent Flory, Université Claude Bernard, Lyon
- 2000 2003 Coordinator, together with Prof. Thomas R. Cundari from the Faculty of Chemistry, University of Memphis, and Prof. Costel Sârbu, from the Faculty of Chemistry, Babeş-Bolyai University, of a research project on "US-Romanian Research on Soft Computing Approaches to Modeling Metal Chemistry for Catalysis Applications", financed by the National Science Foundation, United States, under No. 0077531

- 1998 2001 Coordinator of the Babeş-Bolyai University participation in the H-66 CEEPUS Network, under the coordination of Dr. Jozsef Szabo, szabo@math.klte.hu, "Kossuth Lajos" University, Debrecen, Hungary, and with the participation of the Technical University of Wiena, Austria and "Safarik" Technical University of Kosice, Slovakia
- 1998 2000 Coordinator of the Babeş-Bolyai University participation in the project Tempus Phare Compact Measures Project "Lighting Engineering Center", registered under No. CME-03551-97. The general coordinator of the project is Dr. Florin POP, from the Technical University of Cluj-Napoca, Romania
- **1995 1996** Coordinator of the Babeş-Bolyai University participation in the EUMEDNET Project proposal phase (A European and Mediterranean Trade Support Network). The project general coordinator is Dr. Juan Carlos MARTINEZ COLL, from the Universidad de Malaga, Spain

#### **Participations at International Programs**

- **1999 2001** Member of the project DAWAI research project on the time-adaptive processing of natural language, supported through a grant of the "Deutsche Forschungsgemeinschaft", developed at the Natural Languages Division, Department of Computer Science, University of Hamburg
- **1998 2000** Participation at the Tempus-Phare CME Compact Measures Project CME-03551-97, coordinated by Prof. florin Pop, Technical University of Cluj-Napoca
- 1997 1999 Participation at the Tempus SJEP Project 11168 / 1996, "Restructuring the (Re)Training of School Teachers in Computer Science"
- **1997 1999** Participation at the Tempus SJEP Project 11219 / 1996 "Support for Chemistry College by Computer Aided Learning"
- **1993** Participation, together with Florin Pop, Dorin Beu and Mircea Moca from the Technical University of Cluj-Napoca, at the research grant "Characterization of glazings materials for daylighting applications", under Contract JOU2-CT-0052, Coordinator dr. Marc Fontoynont, ENTPE, France.

#### Member of organizing and program committees

- September 21-24, 2015 Member in the Program Committee of the SYNASC 2015 177th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, organized by West University of Timisoara, Romania
- September 5-8, 2015 Member in the Program Committee at 2015 IEEE International Conference on Intelligent Computer Communication and Processing, ICCP 2015, organized by the Department of Computer Science, Technical University of Cluj-Napoca, Romania
- September 2-4, 2015 Member in the Program Committee of the BCI 2015 7th Balkan Conference on Informatics, organized by University of Craiova, Romania
- May 21-25, 2014 Member in the Steering Committee and Scientific Committee of the 10th Joint Conference on Mathematics and Computer Science, jointly organized by Babes-Bolyai University, Eotvos Lorand University with the support of other Central European universities, Cluj, Romania
- July 8-13, 2013 Member in the Organizing Committee of the Domain Specific Languages summer school, jointly organized by Babes-Bolyai University and Eotvos Lorand University, Cluj, Romania
- July 2-4, 2013 Co-chair of the Organizing and Program Committees at the International Conference on Knowledge Engineering Principles and Techniques, KEPT'2013, organized by the Department of Computer Science, Babes-Bolyai University, Cluj-Napoca, Romania
- February 9–12, 2012 Member of the Steering Committee and Scientific Committee of the 9th Joint Conference on Mathematics and Computer Science, organized in Budapest by Eötvös Lorand University in Budapest and Babeş-Bolyai University in Cluj
- October 2011 Member in the Scientific Committee of UICS 2011, Târgu Mures
- September 2011 Member in the Scientific Committee of MedDecSup 2011, Târgu Mureş.
- September, 2011 Member in the Program Committee at 2011 IEEE International Conference on Intelligent Computer Communication and Processing, ICCP 2011, organized by the Department of Computer Science, Technical University of Cluj-Napoca, Romania

- August 29 September 3, 2011 Local chair and member in the Organizing Committee of the EuroLAN 2011 Summer School on "Natural Language Processing goes industrial", organised by The Romanian Academy, "Alexandru Ioan Cuza" University of Iaşi and Babeş-Bolyai University, Cluj-Napoca
- August 22–27, 2011 Member in the Organizing Committee of 10th International Symposium on Generalized Convexity and Monotonicity, Hosted by Babeş-Bolyai University
- July 4–6, 2011 Co-chair of the Organizing Committee and Program Committee at the International Conference on Knowledge Engineering Principles and Techniques, KEPT'2011, organized by the Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca, Romania
- September, 2010 Member in the Program Committee at 2010 IEEE International Conference on Intelligent Computer Communication and Processing, ICCP 2010, organized by the Department of Computer Science, Technical University of Cluj-Napoca, Romania
- July 14–17, 2010 Member of the Steering Committee and Scientific Committee of the 8th Joint Conference on Mathematics and Computer Science, organized in Komarno by Eötvös Lorand University in Budapest and Babeş-Bolyai University in Cluj
- July 7-9, 2010 Member in Program Committee of the Second International Conference on 'Networked Digital Technologies (NDT 2010), Charles University, Prague, Czech Republic, http://www.dirf.org/ndt2010
- September, 2009 Member in the Program Committee at 2009 IEEE International Conference on Intelligent Computer Communication and Processing, ICCP 2009, organized by the Department of Computer Science, Technical University of Cluj-Napoca, Romania
- July 29-31, 2009 First International Conference on 'Networked Digital Technologies (NDT 2009), Ostrava, Czech Republic, http://argarchive.vsb.cz/ndt2009
- July 2–4, 2009 Co-chair of the Organizing Committee and Program Committee at the International Conference on Knowledge Engineering Principles and Techniques, KEPT'2009, organized by the Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca, Romania
- August 28–30, 2008 Member in the Program Committee at 2008 IEEE International Conference on Intelligent Computer Communication and Processing, ICCP 2008, organized by the Department of Computer Science, Technical University of Cluj-Napoca, Romania
- July 3–6, 2008 Member of the Organizing Committee of the 7th Joint Conference on Mathematics and Computer Science, organized in Cluj by Eötvös Lorand University in Budapest and Babeş-Bolyai University in Cluj
- November 28–30, 2007 Member in the Program Committee of the International Conference on Advances in Computer Vision and Information Technology ACVIT-07, organized by the Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University Aurangabad (MS), India
- September 6–8, 2007 Member in the Program Committee at IEEE 3rd International Conference on Intelligent Computer Communication and Processing, ICCP 2007, organized by the Department of Computer Science, Technical University of Cluj-Napoca, Romania
- June 23–30, 2007 Member of the Organizing Committee at the Second Central European Functional Programming School, CEFP'2007, organized by the Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca, Romania
- June 6–8, 2007 Co-chair of the Organizing and Program Committees at the First International Conference on Knowledge Engineering Principles and Techniques, KEPT'2007, organized by the Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca, Romania
- September 1–2, 2006 Member in the Program Committee and chair of session A1 "Artificial Intelligence and Agents" at IEEE 2nd International Conference on Intelligent Computer Communication and Processing, ICCP 2006, organized by the Department of Computer Science, Technical University of Cluj-Napoca, Romania
- July 25 August 4, 2005 Member in the Organizing Committee at the EuroLAN 2005 Summer School on "The Multilingual Web: Resources, Technologies and Prospects", organized by The Romanian Academy, "Alexandru Ioan Cuza" University of Iasi and Babeş-Bolyai University Cluj-Napoca
- May 20–22, 2005 Chairman at the 4-th International Conference RoEduNet Romania, Sovata, Târgu-Mureş, Romania, organized by the Romanian Education Network RoEduNet and the "Petru Maior" University, Târgu-Mureş

#### **Research Visits**

- July 6–17, 2015 Collaboration and documentation visit, Tongji University, Shanghai and Shanghai Jiao Tong University, Shanghai, China, in the framework of the research program "System for management and intelligent analysis of medical data in order to improve response strategies for acute and chronic diseases", financed by UEFISCDI-CNDI
- July 13–27, 2014 Collaboration and documentation visit, INSA Rouen, France and University Hospital Bruxelles, Belgium, in the framework of the research program "System for management and intelligent analysis of medical data in order to improve response strategies for acute and chronic diseases", financed by UEFISCDI-CNDI
- June 19–26, 2013 Research visit, Dicle University, Diyarbakir, Turkey, in the framework of the research program "System for management and intelligent analysis of medical data in order to improve response strategies for acute and chronic diseases", financed by UEFISCDI-CNDI
- May 21-30, 2009 Invited Professor, 3rd Central European Functional Programming School, CEFP 2009, Eotvos Lorand University, Budapest and Selye Janos University, Komarno, Slovakia
- October 4–11, 2008 Research visit at the Swiss Federal Technical University of Zurich, Switzerland, in the framework of the research grant supported by the Romanian National University Research Council under no. IDEI 550/2007
- June 17 July 15, 2008 Research visit at the University of Liverpool and University of Edinburgh, United Kingdom, in the framework of the research grant supported by the Romanian National University Research Council under no. IDEI 550/2007
- January 1 May 16, 2006 Visiting Professor at the Department of Computer Science, Wayne State University, United States, in the framework of the Academic Exchange Agreement between the two universities
- June 15 August 15, 2002 Research visit at the Department of Chemistry, University of Memphis, United States, in the framework of the joint research program "US-Romanian Research on Soft Computing Approaches to Modeling Metal Chemistry for Catalysis Applications"
- July 1 August 31, 2001 Research visit at the Department of Chemistry, University of Memphis, United States, in the framework of the joint research program "US-Romanian Research on Soft Computing Approaches to Modeling Metal Chemistry for Catalysis Applications"
- October 1, 1999 April 30, 2001 Research scientist at the Natural Language Division, Department of Computer Science, University of Hamburg, as member of the project DAWAI – research project on the time-adaptive processing of natural language, supported through a grant of the German Science Foundation
- August 26 September 10, 1999 Research visit at the Lighting Laboratory of the Helsinki University of Technology, in the framework of the Tempus Phare Project CME-03551-1997
- June, 6 July 5, 1999 Research visit at the Natural Language Division, Department of Computer Science, University of Hamburg, in the framework of the Tempus SJEP Project 11168 / 1996, "Restructuring the (Re)Training of School Teachers in Computer Science", with the task to produce two reports: TR-HH-6-99 "Developing Software: Programming for What?" and TR-HH-7-99 "A Short Introduction to SunOS"
- April 20 July 15, 1998 Didactical visit at the CTI Centre for Chemistry / University of Liverpool, in the framework of the Tempus SJEP Project 11219 / 1996 "Support for Chemistry College by Computer Aided Learning", with the specific task to develop a didactical demonstrative software package for Analytical Chemistry
- September 1, 1996 April 1, 1997 Study visit at Ernest Orlando Lawrence Berkeley National Laboratory and different universities in California, United States
- **December 1, 1995 March 1, 1996** Study visit at the Universitat Politecnica de Catalunya, in Barcelona and the Universidad de Valladolid, in Spain
- March 17 April 15, 1994 Study visit at the University of Liverpool, under a ROMLISS program having the financial support of the British Council and the Soros Foundation for an Open Society; there he initiated an Academic Exchange Agreement between the Babeş-Bolyai University and the University of Liverpool
- October 9, 1992 January 31, 1993 Visit at the University of Geneva in Switzerland, with a scholarship of the Rector of the University of Geneva, for training in the field of Sun computer networks, as a result of the co-operation relationships between the two universities

#### **Conferences and Seminars**

- July 9, 2015 Invited lecture on "Fuzzy Data Analysis" at the graduate research seminar, School of Transportation Engineering, Tongji University, Shanghai, China
- June 17-18, 2014 Invited lecture on "Research Topics in Computer Science at BBU. Case study: Applied Computational Intelligence" at The 5th GIST- European Universities Joint Workshop, Babes-Bolyai University, Cluj, Romania
- May 21-25, 2014 Invited lecture on "Fuzzy Data Analysis. Case Studies" at the 10th Joint Conference on Mathematics and Computer Science, jointly organized by Babes-Bolyai University and Eötvös Loránd University, Cluj, Romania
- October 5-7, 2012 Invited lecture on "A Fuzzy Logic Model of the Romanian Uninominal Elections System" at the 12th International Conference on Artificial Intelligence and Digital Communications, Orsova, Romania
- July 9, 2008 Research Conference on "Theoretical Aspects of Fuzzy Sets in Data Analysis" at the Research Seminar, Department of Computer Science, University of Edinburgh, United Kingdom
- February 21, 2006 Research Conference "Fuzzy Sets in Data Analysis: between Theory and Applications" at the Graduate Seminar, Department of Computer Science, Wayne State University
- October 28–29 2005 The International Conference "The Impact of European Integration on the National Economy", Babeş-Bolyai University, Cluj-Napoca, Romania
- September 18–21, 2005 The 10-th International Conference "Lux Europa 2005", Berlin, Germany
- July 25 August 4, 2005 The EuroLAN 2005 Summer School on "The MUltilingual Web: Resources, Technologies and Prospects", organised by The Romanian Academy, "Alexandru Ioan Cuza" University of Iasi and Babeş-Bolyai University Cluj-Napoca.
- May 20–22, 2005 The 4-th International Conference RoEduNet Romania, Sovata, Târgu-Mureş, Romania, organized by the Romanian Education Network RoEduNet and the "Petru Maior" University, Târgu-Mureş
- **December 4, 2004** Professorship inaugural conference, "Fuzzy Sets in Data Analysis: between Theory and Applications", Faculty of Mathematics and Computer Science, Babeş-Bolyai University, Cluj-Napoca, Romania
- September 19–21, 2001 The first European Conference on "Evolutionary Methods for Design, Optimisation and Control with Applications to Industrial Problems" EUROGEN 2001, Athens, Greece
- September 5–7, 2001 The International Conference on "Recent Advances in Natural Language Processing" RANLP2001, Tzigov Chark, Bulgaria
- July 17, 2001 Presented the seminar on "Fuzzy Clustering" at the Research Group of Computational Chemistry, Faculty of Chemistry, University of Memphis, United States
- June 5–10, 2001 Invited lecture and chairman of one session at the 4-th Joint Conference on Mathematics and Computer Science, Felix-Oradea, Romania, jointly organized by Babeş-Bolyai University, Cluj and "Eötvös Loránd" University, Budapest
- July 31 August 4, 2000 The 18-th International Conference on Computational Linguistics COLING 2000, Saarbrücken, Germany
- June 19, 2000 Presented the talk "Self-Organizing Map in Text Mining" at the Text Mining Seminar of the Natural Language Division, Faculty of Computer Science, University of Hamburg, Germany
- May 11, 2000 Presented the talk "A Soft-Computing Approach to NLP" at the Research Seminar of the Natural Language Division, Faculty of Computer Science, University of Hamburg, Germany
- **November 18, 1999** Presented the talk "Fuzzy Clustering" at the Research Seminar of the Natural Language Division, Faculty of Computer Science, University of Hamburg, Germany
- September 8, 1999 Invited to present the conference "Fuzzy Clustering" at the Research Seminar of the Lighting Laboratory, Department of Electrical and Communications Engineering, Helsinki University of Technology, Helsinki, Finland
- October 6–10, 1998 Presentation "ActiveX" at the Advanced Educational Technologies Intensive Courses organized under the Tempus S-JEP 12518-97 program, with the participation of the "Petru Maior" University, Târgu Mures, Babeş-Bolyai University, Cluj-Napoca, Technical University of Cluj-Napoca, National College University of Ireland, Galway and National Technical University of Athens, Greece

- July 20–25, 1997 Advanced Summer School "Parallel and Distributed Computer Systems PARADIS '97", organized in Mangalia (Romania) by the "Politehnica" University of Bucharest, the Research Institute for Informatics Bucharest, the University of Marseille, and Glossy SA (Global Services and Systems) Bucharest, under the sponsorship of the Service Culturel of the Embassy of France in Romania, the Romanian National Commission for Informatics and the Romanian National Tempus Office
- **February 20, 1997** Invited to present the conference "Fuzzy Clustering" at the Berkeley Initiative in Soft Computing Seminar, Computer Science Division, Department Electrical Engineering and Computer Science, University of California, Berkeley
- October 7, 1996 Microsoft Net Results '97 Seminar, Sacramento, CA
- September 25–26, 1996 Northern California Plant Enginnering and Maintenance Show and Conference, Santa Clara Convention Center, Santa Clara, CA
- **February 7, 1996** Invited to present the conference "Fuzzy Clustering and Related Items" at the Artificial Intelligence Group Seminar, Department of Software, Computer Science Faculty of Barcelona, Universitat Politecnica de Catalunya
- January 19–20, 1996 Inter-Med 96, The first conference on the Mediterranean and the global information society, Barcelona, Spain
- **December 1–3, 1994** C.I.E. (Comission Internationale de l'Eclairage) "Expert Symposium '94 on Advances in Photometry – Lighting Quality and Energy Conservation", Vienna, Austria
- August 1–5, 1994 Summer School "Computer Assisted Learning in the Field of Artificial Intelligence", organized in Bucharest by the Romanian Academy, Department of Science and Technology of Information, Center of Advanced Research in Automatic Learning, Natural Language Processing and Conceptual Modelling and the Instituto "Dalle Molle" from Lugano, Switzerland
- September 26-29, 1993 2nd European Conference on Energy-Efficient Lighting "Right Light", Arnhem, Netherlands
- October 5–9, 1992 C.I.E. (Comission Internationale de l'Eclairage) Seminar "Computer Programs for Light and Lighting", Vienna, Austria

# **International Co-operations**

- David CARTER, School of Architecture, University of Liverpool, Great Britain
- Ulises CORTES, Facultat d'Informatica de Barcelona, Universitat Politecnica de Catalunya, Spain
- Farshad FOTOUHI, Department of Computer Science, Wayne State University, USA
- Jean-François L'HAIRE, William BOREL, Services Informatiques, Universite de Geneve, Switzerland
- Ramon SAN MARTIN, E.T.S. Enginyers Industrials de Barcelona, UPC, Barcelona, Spain
- Juan Carlos MARTINEZ COLL, Facultad de Derecho, Universidad de Malaga, Spain
- Joan JACAS MORAL, E.T.S. d'Arquitectura de Barcelona, UPC, Barcelona, Spain
- Malcom J. TAYLOR, Department of Computer Science, University of Liverpool, Great Britain
- Lotfi A. ZADEH, Computer Science Division, Department of EECS, University of California at Berkeley, United States

# References

- Dr. David CARTER, School of Architecture, University of Liverpool, Leverhulme Building, Abercromby Square, P.O. Box 147, Liverpool L69 3BX, Great Britain, E-mail: eb09@liverpool.ac.uk
- Dr. Ulises CORTES, Facultat d'Informatica de Barcelona, Universitat Politecnica de Catalunya, c/ Jordi Girona, 1-3, ES-08034 Barcelona, Spain, E-mail: ia@goliat.upc.es
- Dr. Farshad FOTOUHI, Head, Department of Computer Science, Wayne State University, Detroit, 428 State Hall, Michigan 48202, USA, E-mail: fotouhi@cs.wayne.edu

- Dr. Militon FRENŢIU, Head, Chair of Programming Languages and Methods, Department of Computer Science, Faculty of Mathematics and Computer Science, Babeş-Bolyai University, 1 M. Kogalniceanu St., RO-400084 Cluj-Napoca, Romania, E-mail: mfrentiu@cs.ubbcluj.ro
- Dr. Jean-François L'HAIRE, Services Informatiques, Universite de Geneve, 24, rue General Dufour, CH-1211 Geneve 4, Switzerland, E-mail: lhaire@uni2a.unige.ch

# List of papers

#### Dr. Horia F. Pop, Professor

# I Papers in publications from ISI Web of Knowledge

#### I.1 Articles indexed in ISI Web of Knowledge

- [1] CUNDARI, T. R., DENG, J., POP, H. F., AND SÂRBU, C. Structural analysis of transition metal Beta-X substituent interactions. Towards the use of soft computing methods for catalyst modeling. *Journal of Chemical Information and Computer Sciences* 40, 4 (2000), 1052–1061.
- [2] CUNDARI, T. R., SÂRBU, C., AND POP, H. F. Robust Fuzzy Principal Component Analysis (FPCA). a comparative study concerning interaction of carbon-hydrogen bonds with molybdenum-oxo bonds. *Journal* of Chemical Information and Computer Sciences 42, 6 (2002), 1363–1369.
- [3] DUMITRESCU, D., AND POP, H. F. Convex decomposition of fuzzy partitions, I. *Fuzzy Sets and Systems* 73, 3 (1995), 365–376. ISSN 0165-0114.
- [4] DUMITRESCU, D., AND POP, H. F. Convex decomposition of fuzzy partitions, II. *Fuzzy Sets and Systems* 96, 1 (1998), 111–118. ISSN 0165-0114.
- [5] DUMITRESCU, D., POP, H. F., AND SÂRBU, C. Fuzzy hierarchical cross-classification of Greek muds. Journal of Chemical Information and Computer Sciences 35 (1995), 851–857.
- [6] DUMITRESCU, D., SÂRBU, C., AND POP, H. F. A fuzzy divisive hierarchical clustering algorithm for the optimal choice of set of solvent systems. *Analytical Letters* 27, 5 (1994). 1031–1054.
- [7] HOROWITZ, O., POP, H. F., AND SÂRBU, C. Recognition of the forms applied to chemical elements. *Revista de Chimie 51*, 1 (2000), 17–29.
- [8] POP, H. F., DUMITRESCU, D., AND SÂRBU, C. A study of Roman pottery (terra sigillata) using hierarchical fuzzy clustering. *Analytica Chimica Acta 310*, 2 (1995), 269–279.
- [9] POP, H. F., EINAX, J. W., AND SÂRBU, C. Classical and fuzzy principal component analysis of some environmental samples concerning the pollution with heavy metals. *Chemometrics and Intelligent Laboratory Systems* 97, 1 (2009), 25–32.
- [10] POP, H. F., POP, T. L., AND SÂRBU, C. Assessment of heart disease using fuzzy classification techniques. *The Scientific World Journal 1* (2001), 369–390. ISSN 1537-744X.
- [11] POP, H. F., AND SÂRBU, C. A new fuzzy regression algorithm. Analytical Chemistry 68, 5 (1996), 771–778.
- [12] POP, H. F., AND SÂRBU, C. The fuzzy hierarchical cross-clustering algorithm. Improvements and Comparative study. *Journal of Chemical Information and Computer Sciences* 37, 3 (1997), 510–516.
- [13] POP, H. F., AND SÂRBU, C. Fuzzy regression. i: The heteroskedastic case. *Revista de Chimie* 48, 8 (1997), 732–737.
- [14] POP, H. F., AND SÂRBU, C. A new fuzzy discriminant analysis method. MATCH Communications in Mathematical and in Computer Chemistry 69, 2 (2013), 391–412.
- [15] POP, H. F., SÂRBU, C., ŞTEFĂNESCU, A., BIZO, A., AND POP, T. L. Prognostic factors in liver failure in children by discriminant analysis of clinical data. a chemometric approach. *Studia Universitatis Babeş-Bolyai, Series Chemia* 60, 2 (2015), 101–108.
- [16] POP, H. F., SÂRBU, C., HOROWITZ, O., AND DUMITRESCU, D. A fuzzy classification of the chemical elements. *Journal of Chemical Information and Computer Sciences* 36, 3 (1996), 465–482.

- [17] SÂRBU, C., DUMITRESCU, D., AND POP, H. F. Optimum selection and combination of solvent systems in thin layer cromatography using the fuzzy sets theory. *Revista de Chimie* 44, 5 (1993), 450–459.
- [18] SÂRBU, C., HOROWITZ, O., AND POP, H. F. Fuzzy cross-classification of the chemical elements, based both on their physical, chemical and structural features. *Journal of Chemical Information and Computer Sciences* 36, 6 (1996), 1098–1108.
- [19] SÂRBU, C., AND POP, H. F. Fuzzy regression. ii: Outliers cases. *Revista de Chimie* 48, 10–11 (1997), 888–891.
- [20] SÂRBU, C., AND POP, H. F. Fuzzy clustering analysis of the first 10 MEIC chemicals. *Chemosphere* 40, 5 (2000), 513–520.
- [21] SÂRBU, C., AND POP, H. F. Fuzzy classification and comparison of some Romanian and American coals. MATCH — Communications in Mathematical and in Computer Chemistry 44 (October 2001), 387–400.
- [22] SÂRBU, C., AND POP, H. F. Fuzzy robust estimation of central location. Talanta 54 (2001), 125–130.
- [23] SÂRBU, C., AND POP, H. F. Fuzzy soft-computing methods and their applications in chemistry. In *Reviews in Computational Chemistry*, K. B. Lipkowitz, R. Larter, and T. R. Cundari, Eds., vol. 20. VCH Publishers, New York, 2004, pp. 249–332. ISBN 0-471-44525-8.
- [24] SÂRBU, C., AND POP, H. F. Principal Component Analysis versus Fuzzy Principal Component Analysis. A case study: The quality of Danube water (1985-1996). *Talanta 65* (2005), 1215–1220.
- [25] SARBU, C., POP, H. F., ELEKES, R. S., AND COVACI, G. Intelligent disease identification based on discriminant analysis. *Revista de Chimie 59*, 11 (2008), 1237–1241.

#### I.2 Proceedings papers indexed in ISI Web of Knowledge

- ŞERBAN, C., VESCAN, A., AND POP, H. F. A new component selection algorithm based on metrics and fuzzy clustering analysis. In *Proceedings of the 4th International Conference on Hybrid Artificial Intelligence Systems. Lecture Notes in Artificial Intelligence, LNCS 5572/2009* (Salamanca, Spain, June 10-12 2009), pp. 621–628. ISBN: 978-3-642-02318-7.
- [2] ŞERBAN, C., VESCAN, A., AND POP, H. F. A conceptual framework for component-based system metrics definition. In 9-th RoEduNet IEEE International Conference (Lucian Blaga University, Sibiu, Romania, June 24–26 2010), pp. 73–78. http://roedu2010.ulbsibiu.ro.
- [3] ŞERBAN, O. M., PAUCHET, A., AND POP, H. F. Recognizing emotions in short text. In *International Conference on Agents and Artificial Intelligence* (Vilamoura, Algrave, Portugal, February 7–8 2012), J. Filipe and A. Fred, Eds., SciTePress, pp. 477–480. ISBN: 978-989-8425-95-9.
- [4] FEI, X., LU, S., POP, H. F., AND LIANG, L. R. GFBA: A genetic fuzzy biclustering algorithm for discovering value-coherent biclusters. In 2007 International Symposium on Bioinformatics Research and Applications (ISBRA'2007). Lecture Notes in Bioinformatics, LNCS 4463/2007 (Georgia State University, Atlanta, May 6-9 2007), pp. 1–12. ISBN: 978-3-540-72030-0.
- [5] FRENȚIU, M., AND POP, H. F. Tracking mistakes in software measurement using fuzzy data analysis. In *The 4-th International Conference RoEduNet Romania* (Sovata, Târgu-Mureş, Romania, May 20–22 2005), pp. 150–157. Organized by the Romanian Education Network RoEduNet and the "Petru Maior" University, Târgu-Mureş. ISBN 973-7794-26-5.
- [6] GĂCEANU, R. D., AND POP, H. F. A parallel clustering approach for hybrid data discovery. In *Proceedings of the 12th International Conference on Informatics, Informatics 2013* (Spišská Nová Ves, Slovakia, November 5–7 2013), V. Novitzká and S. Hudák, Eds., Slovak Society for Applied Cybernetics and Informatics, pp. 240–246.
- [7] POP, H. F. A tutorial on object-orientedness in functional programming. In Second Central European Functional Programming Summer School (CEFP 2007), Revised Selected Lectures. Lecture Notes in Computer Science, LNCS 5161/2008 (Babeş-Bolyai University, Cluj-Napoca, Romania, June 23–30 2007), pp. 228– 249. ISBN 978-3-540-88058-5.

- [8] POP, H. F., AND FRENȚIU, M. Applications of principal components methods. In *The International Conference "Complexity and Intelligence of the Artificial and Natural Complex Systems. Medical Applications of the Complex Systems. Biomedical Computing"* (November 8–10 2008), "Petru Maior" University Târgu Mureş, Romanian Academic Bucharest, pp. 232–235. ISSN 2065-0426.
- [9] POP, H. F., AND FRENȚIU, M. Applications of principal components methods. In *Complexity in Artificial and Natural Systems, Proceedings* (2008), Editura Universității Petru Maior, Târgu-Mureş, pp. 267–270. ISBN 978-973-7794-76-5.
- [10] POP, H. F., AND FRENŢIU, M. Effort estimation by analogy based on soft computing methods. In KEPT 2009 International Conference Knowledge Engineering Principles and Techniques. Selected Papers (2009), Cluj University Press, Cluj-Napoca, Romania, pp. 239–246. (MathSciNet, ZMath).
- [11] TAN, L., FOTOUHI, F., GROSKY, W., POP, H. F., AND MOUADDIB, N. Improving similarity join algorithms using fuzzy clustering technique. In *ICDMW '09: Proceedings of the 2009 IEEE International Conference on Data Mining Workshops* (Washington, DC, USA, 2009), IEEE Computer Society, pp. 545– 550.
- [12] VESCAN, A., GROŞAN, C., AND POP, H. F. Evolutionary algorithms for the component selection problem. In *The 2nd International Workshop Evolutionary Techniques in Data Processing* (2008), vol. 1529-4188, IEEE Computer Society Press, pp. 509–513. ISBN 978-0-7695-3299-8.

#### I.3 Proceedings papers in conferences from ISI Web of Knowledge

- ŞERBAN, C., VESCAN, A., AND POP, H. F. A formal model for component-based system assessment. In Second international conference on Computational Intelligence, Modelling and Simulation (Bali, September 28–30 2010), pp. 261–266.
- [2] GEORGESCU, V., POP, H. F., TUDORACHE, O., SABĂU, H., CIONTU, C., AND STRÂMBU, V. Romanian registry on cardiac arrest – a piece in the puzzle – romanian contribution in the EuReCA project. In 10th Congress of the European Resuscitation Council. Resuscitation, 81/2010 (Porto, Portugal, December 2–4 2010), J. Nolan, Ed., Elsevier Publishers, p. S39. doi:10.1016/j.resuscitation.2010.09.167. (Short paper; Scopus).
- [3] SABĂU, H., TUDORACHE, O., POP, H. F., GEORGESCU, V., STRÂMBU, V., DIMITRIU, I., NICOLAU, M. S., CIMPOEŞU, D., BORCEA, H., AND BRÂNZEA, A. Joining the EuReCA — The Romanian Registry on Cardiac Arrest — a year later. In *11th Congress of the European Resuscitation Council. Resuscitation*, 82/2011 (Valetta, Malta, October 14–15 2011), J. Nolan, Ed., Elsevier Publishers, p. S19. doi:10.1016/S0300-9572(11)70075-2. (Short paper; Scopus).
- [4] VESCAN, A., AND POP, H. F. Automatic configuration for the component selection problem. In CSTST '08: Proceedings of the 5th international conference on Soft computing as transdisciplinary science and technology (Cergy-Pontoise, France, October 27–31 2008), ACM, New York, NY, USA, pp. 479–483. ISBN 978-1-60558-046-3.

# **II** International Papers

#### **II.1** Papers in international journals

- CHINDRIŞ, M., COLOŞI, T., AND POP, H. F. On the numerical modeling and simulation of the control system for a medium frequency static converter. *Acta Electrotehnica Napocensis 39*, 1 (1998), 51–56. (Referativnyi Zhurnal, DOAJ).
- [2] ŞERBAN, C., AND POP, H. F. Software quality assessment using a fuzzy clustering approach. *Studia* Universitatis Babes-Bolyai, Informatica 53, 2 (2008), 27–38. (MathSciNet, ZMath).
- [3] ŞERBAN, C., VESCAN, A., AND POP, H. F. Component selection based on fuzzy clustering analysis. *Creative Mathematics and Informatics* 17, 3 (2008), 505–510. (MathSciNet, ZMath).

- [4] DUMITRESCU, D., AND POP, H. F. A preliminary bibliography on fuzzy clustering and related fields. *Studia Universitatis Babeş-Bolyai, Mathematica 35*, 3 (1990), 13–24. (MathSciNet, ZMath).
- [5] FRENŢIU, M., LAZĂR, I., AND POP, H. F. On individual projects in software engineering education. Studia Universitatis Babeş-Bolyai, Informatica 48, 2 (2003), 83–94. (MathSciNet, ZMath).
- [6] FRENŢIU, M., AND POP, H. F. A study of dependence of software attributes using data analysis techniques. Studia Universitatis Babeş-Bolyai, Informatica 47, 2 (2002), 53–66. (MathSciNet, ZMath).
- [7] FRENŢIU, M., AND POP, H. F. Overview of fuzzy methods for effort estimation by analogy. *Studia* Universitatis Babeş-Bolyai, Informatica 1 (2009), 68–74. (MathSciNet, ZMath).
- [8] FRENȚIU, M., AND POP, H. F. Common mistakes in writing a scientific papers. *Studia Universitatis Babes-Bolyai, Informatica* 55, 4 (2010), 3–8. (MathSciNet, ZMath).
- [9] GĂCEANU, R. D., AND POP, H. F. A context-aware asm-based clustering algorithm. Studia Universitatis Babes-Bolyai, Informatica 56, 2 (2011), 55–60. (MathSciNet, ZMath).
- [10] GĂCEANU, R. D., AND POP, H. F. A fuzzy incremental clustering approach to hybrid data discovery. *Acta Electrotehnical et Informatica 12*, 2 (2012), 16–23. (MathSciNet, ZMath).
- [11] GĂCEANU, R. D., AND POP, H. F. An incremental approach to the set covering problem. Studia Universitatis Babes-Bolyai, Informatica 57, 2 (2012), 61–72. (MathSciNet, ZMath).
- [12] GĂCEANU, R. D., AND POP, H. F. Medical procedure breaches detection using a fuzzy clustering approach. *Central European Journal of Computer Science* 4, 3 (2014), 127–140.
- [13] GĂCEANU, R. D., POP, H. F., AND SOTOC, S. A. An agent based approach for parallel constraint verification. *Studia Universitatis Babes-Bolyai, Informatica* 58, 3 (2013), 5–16. (MathSciNet, ZMath).
- [14] MIRON, A., AINOUZ, S., ROGOZAN, A., BENSRHAIR, A., AND POP, H. F. Stereomatching using radiometric invariant measures. *Studia Universitatis Babes-Bolyai, Informatica* 56, 3 (2011), 91–96. (MathSciNet, ZMath).
- [15] POP, F., AND POP, H. F. Residential energy efficient lighting. Acta Electrotechnica Napocensis Special Issue (2008), 397–403. The 2nd International Conference on Modern Power Systems MPS 2008, November 12–14, 2008. Academy of Technical Sciences of Romania, Technical University of Cluj-Napoca, Romania. ISSN 1224-2497 (Referativnyi Zhurnal, DOAJ).
- [16] POP, H. F. A study of the properties of the Fuzzy Relaxation Algorithm. Studia Universitatis Babeş-Bolyai, Mathematica 39, 3 (1994), 67–74. (MathSciNet, ZMath).
- [17] POP, H. F. Supervised fuzzy classifiers. *Studia Universitatis Babeş-Bolyai, Mathematica 40*, 3 (1995), 89–100. (MathSciNet, ZMath).
- [18] POP, H. F. SAADI: Software for fuzzy clustering and related fields. *Studia Universitatis Babeş-Bolyai*, *Informatica* 41, 1 (1996), 69–80. (MathSciNet, ZMath).
- [19] POP, H. F. Improvements of the fuzzy cross-clustering algorithm. Studia Universitatis Babeş-Bolyai, Informatica 42, 2 (1997), 3–12. (MathSciNet, ZMath).
- [20] POP, H. F. A new regression technique based on fuzzy sets. *Studia Universitatis Babeş-Bolyai, Informatica* 43, 1 (1998), 3–12. (MathSciNet, ZMath).
- [21] POP, H. F. Principal Components Analysis based on a fuzzy sets approach. *Studia Universitatis Babeş-Bolyai, Informatica 46*, 2 (2001), 45–52. (MathSciNet, ZMath).
- [22] POP, H. F. Data analysis with fuzzy sets: a short survey. *Studia Universitatis Babeş-Bolyai, Informatica* 49, 2 (2004), 111–122. (MathSciNet, ZMath).
- [23] POP, H. F. Development of robust fuzzy regression techniques using a fuzzy clustering approach. Pure Mathematics and Applications 14, 3 (2004), 221–232.

- [24] POP, H. F., AND FRENŢIU, M. On software attributes relationship using a new fuzzy c-bipartitioning method. *Studia Universitatis Babeş-Bolyai, Informatica Special Issue* (2007), 219–226. International Conference "Knowledge Engineering Principles and Techniques" (KEPT 2007), June 6–8 2007, Babeş-Bolyai University, Cluj-Napoca, Romania. (MathSciNet, ZMath).
- [25] POP, H. F., AND FRENȚIU, M. Fuzzy clustering in software engineering. Analele Universității de Vest, Timișoara, Seria Matematică-Informatică 46, 2 (2008), 123–131. (MathSciNet, ZMath).
- [26] POP, H. F., AND FRENȚIU, M. Fuzzy data analysis for software metrics assessment of student projects. In Topics in Mathematics, Computer Science and Philosophy. A Festschrift for Wolfgang W. Breckner on his 65th Anniversary (Cluj-Napoca, 2008), Ştefan Cobzaş, Ed., Presa Universitară Clujeană, pp. 23–32. (MathSciNet, ZMath).
- [27] PUŞCĂ, M. V., POP, H. F., ROMAN, M. N., AND IANCU, V. Processing ECG data using multivariate data analysis. Annals of the Academy of Romanian Scientists, Series on Science and Technology of Information 3, 2 (2010), 23–38.
- [28] SCHRÖDER, I., POP, H. F., MENZEL, W., AND FOTH, K. A. Learning the constraints weights of a dependency grammar using genetic algorithms. In *Evolutionary Methods for Design, Optimisation and Control with Applications to Industrial Problems*, K. C. Giannakoglou, D. T. Tsahalis, J. Périaux, K. D. Papaillou, and T. Fogarty, Eds. CIMNE Barcelona, 2002, pp. 243–247.
- [29] TÂMBULEA, L., AND POP, H. F. Management of web pages using XML documents. *Studia Universitatis Babeş-Bolyai, Informatica Special Issue* (2007), 236–243. International Conference "Knowledge Engineering Principles and Techniques" (KEPT 2007), June 6–8 2007, Babeş-Bolyai University, Cluj-Napoca, Romania. (MathSciNet, ZMath).
- [30] TĂTAR, D., POP, H. F., FRENŢIU, M., AND DUMITRESCU, D. The first international conference on knowledge engineering principles and techniques (KEPT 2007). *Studia Universitatis Babeş-Bolyai, Informatica* 52, 1 (2007), 3–10. (MathSciNet, ZMath).
- [31] VESCAN, A., AND POP, H. F. Constraint optimization-based component selection problem. *Studia Universitatis Babeş-Bolyai, Informatica 53*, 2 (2008), 3–14. (MathSciNet, ZMath).
- [32] VESCAN, A., AND POP, H. F. Automatic criteria-based configuration for the component selection problem. International Journal of Computer Information Systems and Industrial Management Applications 4 (2012), 641–647.

#### **II.2** Papers in proceedings of international conferences

- BOIAN, F., BOIAN, R., VANCEA, A., AND POP, H. F. Distance learning and supporting tools at babesbolyai university. In *The IEEII – Informatics Education in Europe Conference* (Thessaloniki, Greece, November 29–30 2007), pp. 332–340. ISBN: 978-960-89629-3-4.
- [2] BOIAN, F. M., POP, H. F., IURIAN, S., IURIAN, M., AND VANCEA, A. The Unix environment at the "Babeş-Bolyai" University. In *The Second International Conference on Open Systems ROSE'94, Technical Sessions* (Bucharest, Romania, November, 3–5 1994), pp. 145–149.
- [3] BOIAN, F. M., VANCEA, A., AND POP, H. F. Teaching parallel and distributed computing. In *The Third International Conference on Open Systems ROSE'95, Technical Sessions* (Bucharest, Romania, November, 1–4 1995), pp. 66–74.
- [4] CHINDRIŞ, M., COLOŞI, T., AND POP, H. F. On the numerical modeling and simulation of the control system for a medium frequency static converter. In *First International Symposium on Mathematical Models in Automation and Robotics, MMAR'94* (Międzyzdroje, Poland, September 1–3 1994), pp. 181–186.
- [5] DUMITRESCU, D., LOWY, D. A., ONICIU, L., KISS-SZETSI, S., AND POP, H. F. Propionitrile electrosynthesis. pattern recognition in the evaluation of gas-chromatographic data. In *The 41st Meeting of International Society of Electrochemistry* (Prague, August 20–25 1990), pp. 58–59.
- [6] DUMITRESCU, D., SAS, L., ŞERBAN, G., CÂMPAN, A., DĂRĂBANT, A. S., POP, H. F., AND TÂMBULEA, L. Cooperative learning for distributed data mining. In "Collaborative Support Systems in Business and Education", International workshop (Cluj-Napoca, Romania, October 28–29 2005), pp. 432–440.

- [7] FOTH, K. A., MENZEL, W., POP, H. F., AND SCHRÖDER, I. An experiment in incremental parsing using weighted constraints. In *The 18-th International Conference on Computational Linguistics (COLING2000)* (Saarbrücken, Germany, July, 31 – August, 4 2000), pp. 1026–1030. ISBN 1-55860-717-X.
- [8] FRENŢIU, M., AND POP, H. F. Effort estimation by analogy using a fuzzy clustering approach. *Studia Universitatis Babeş-Bolyai, Informatica Special Issue* (2009), 202–205. KEPT 2009 International Conference Knowledge Engineering Principles and Techniques, July 2–4 2009, Babeş-Bolyai University, Cluj-Napoca, Romania. (MathSciNet, ZMath).
- [9] GĂCEANU, R. D., AND POP, H. F. An adaptive fuzzy agent clustering algorithm for search engines. In 8th Joint Conference on Mathematics and Computer Science MaCS 2010, Selected papers (Komarno, Slovakia, July 14–17 2010), H. F. Pop and A. Bege, Eds., Novadat LTD Publishers, pp. 185–196. (MathSciNet, ZMath).
- [10] GĂCEANU, R. D., AND POP, H. F. A fuzzy clustering algorithm for dynamic environments. In KEPT 2011 International Conference Knowledge Engineering Principles and Techniques. Selected Papers (2011), Cluj University Press, Cluj-Napoca, Romania, pp. 119–130. ISSN: 2067-1180. (MathSciNet, ZMath).
- [11] GĂCEANU, R. D., AND POP, H. F. An incremental asm-based fuzzy clustering algorithm. In *Proceedings of the Eleventh International Conference on Informatics, Informatics 2011* (Rožňava, Slovakia, November 16-18 2011), V. Novitzká and S. Hudák, Eds., Slovak Society for Applied Cybernetics and Informatics, pp. 198–204. (indexed MathematicalReviews).
- [12] MIRON, A., AINOUZ, S., ROGOZAN, A., BENSRHAIR, A., AND POP, H. F. Stereomatching using radiometric invariant measures. In *KEPT 2011 International Conference Knowledge Engineering Principles* and Techniques. Selected Papers (2011), Cluj University Press, Cluj-Napoca, Romania, pp. 369–378. ISSN: 2067-1180. (MathSciNet, ZMath).
- [13] ORBAN, S., POP, H. F., AND POP, F. Chromaticity in architectural lighting A luminous environment feature. In *ILUMINAT 2003 International Conference (Commision Internationale de l'Eclairage – Comitetul Național Român de Iluminat)* (Cluj-Napoca, Romania, May 8–9 2003), pp. 38.1–38.4. ISBN 973-9357-44-X.
- [14] POP, F., BEU, D., POP, H. F., AND MOCA, M. Practical aspects of lighting quality / Refurbishment and modernization of lighting installations using energy efficient systems. In C.I.E. Expert Symposium '94 on Advances in Photometry — Lighting Quality and Energy Conservation (Vienna, Austria, December 1–3 1994), pp. 165–170. ISBN 3-900-734-61-5.
- [15] POP, F., ORBAN, S., AND POP, H. F. Integration of the architectural lighting on the environment. In *International Conference CONSTRUCTIONS 2003* (Cluj-Napoca, Romania, May 16–17 2003), pp. 407– 410. ISBN 973-9350-87-9, 973-9350-90-9.
- [16] POP, F., AND POP, H. F. L.I.D. computer programs for lighting installations design. In *C.I.E. Seminar of Computer Programs for Light and Lighting* (Vienna, Austria, October 5–9 1992), p. 80. Publ. No. CIE x005. ISBN 3-900-734-41-0.
- [17] POP, F., AND POP, H. F. I.E.L.D. Interior and Exterior Lighting Design, computer programs for didactic activities. In *The Second European Conference on Energy-Efficient Lighting RIGHT LIGHT* (Arnhem, The Netherlands, September 26–29 1993), pp. 666–672.
- [18] POP, H. F. Development of robust fuzzy regression techniques using a fuzzy clustering approach. In *The* 4-th Joint Conference on Mathematics and Computer Science (Felix-Oradea, Romania, June 5–10 2001), pp. 5–7. Jointly organized by Babeş-Bolyai University, Cluj and "Eötvös Loránd" University, Budapest.
- [19] POP, H. F., AND FRENȚIU, M. Applications of principal components methods. In Complexity and Intelligence of the Artificial and Natural Complex Systems. Medical Applications of the Complex Systems, Biomedical Computing. CANS 2008 (2008), IEEE Computer Society, Los Alamos, USA, pp. 103–109. ISBN 978-0-7695-3621-7.
- [20] POP, H. F., MUNTEANU, A., AND POP, F. A fuzzy clustering approach of optimal evaluation criteria for electric network distribution systems. In *Interdisciplinarity in Engineering, Inter-Ing 2003 Scientific Conference with International Participation, Volume II* (Petru Maior University, Târgu-Mureş, Romania, November 6–7 2003), pp. 293–298.

- [21] POP, H. F., AND POP, L. G. Education for engineering students: The case of logic. In SIELMEN 2007, The 6-th International Conference on Electromechanical and Power Systems, Annals of the University of Craiova, Series Electric Engineering, No. 31, 2007, Vol. I (Technical University of Moldova, Chişinău, Republic of Moldova, October 4–6 2007), pp. 259–264.
- [22] POP, M., POP, H. F., AND POP, F. LQ A toolkit for lighting quality evaluation. In ILUMINAT 2003 International Conference (Commission Internationale de l'Eclairage – Comitetul Național Român de Iluminat) (Cluj-Napoca, Romania, May 8–9 2003), pp. 40.1–40.5. ISBN 973-9357-44-X.
- [23] POP, M., POP, H. F., AND POP, F. Appraisal of indoor lighting systems quality. In *The 4th Conference BalkanLight 2008* (October 7–10 2008), Lighting Engineering Society of Slovenia, pp. 165–172. ISBN 978-961-248-127-8.
- [24] SCHRÖDER, I., POP, H. F., MENZEL, W., AND FOTH, K. A. Learning grammar weights using genetic algorithms. In *RANLP-2001 "Recent Advances in NLP"* (Tzigov Chark, Bulgaria, September 5–7 2001), pp. 235–239. ISBN 954-90906-1-2.
- [25] SCHRÖDER, I., POP, H. F., MENZEL, W., AND FOTH, K. A. Learning the constraints weights of a dependency grammar using genetic algorithms. In *EUROGEN 2001, "Evolutionary Methods for Design, Optimisation and Control with Applications to Industrial Problems"* (Athens, Greece, September 19–21 2001), pp. 49.1–49.2.
- [26] TÂMBULEA, L., AND POP, H. F. Cooperative model for web sites authoring. In Annals of the "Tiberiu Popoviciu" Seminar. Supplement: International Workshop in Collaborative Systems (Babeş-Bolyai University, Cluj-Napoca, Romania, 2006), pp. 329–336. ISSN 1584-4536.
- [27] VESCAN, A., AND POP, H. F. The component selection problem as a constraint optimization problem. In Software Engineering Techniques in Progress. The 3rd IFIP TC2 Central and East European Conference on Software Engineering Techniques CEE-SET 2008 (Wroclaw, Poland, 2008), Wroclaw University of Technology, pp. 208–211.

# **III** National Papers

#### **III.1** Papers in national journals

- [1] DUMITRESCU, D., AND POP, H. F. Algorithms for convex decomposition of finite fuzzy partitions. *Fuzzy* Systems & A.I. Magazine 4, 2–3 (1995), 5–12.
- [2] FRENŢIU, M., DUMITRESCU, D., PÂRV, B., TÂMBULEA, L., AND POP, H. F. Algoritmi utili existenţi în reţeaua universităţii (useful algorithms existing in the university computer network). Babeş-Bolyai University, Faculty of Mathematics and Computer Science Research Seminars, Seminar on Computer Science, Preprint, 2 (1999), 111–122.
- [3] FRENŢIU, M., AND POP, H. F. A study of licence examination results using fuzzy clustering techniques. Babeş-Bolyai University, Faculty of Mathematics and Computer Science Research Seminars, Seminar on Computer Science, Preprint (2001), 99–106.
- [4] POP, F., AND POP, H. F. Programe de calcul pentru instalațiile electrice ale clădirilor (software for electrical installations in buildings). *Instalații în Construcții*, 3–4–5 (1990), 64–67.
- [5] POP, F., AND POP, H. F. Aspecte actuale privind proiectarea asistată de calculator a sistemelor de iluminat electrice (actual aspects concerning the computer assisted design of electrical lighting systems). *Energetica* 41, 2-B (March–April 1993), 60–66.
- [6] POP, F., POP, H. F., AND BEU, D. Interior Lighting Design computer programs for calculus and graphic representation. *Acta Taechnica Napocensis, Series Construcții Arhitectură 35* (1992), 99–109.
- [7] POP, F., POP, H. F., BEU, D., AND CIUGUDEAN, C. Iluminat eficient energetic în locuințe. *Revista Română de Informatică și Automatică 18*, 3 (2008), 101–112. ISSN 1220-1758.

- [8] POP, F., POP, H. F., AND ORBAN, S. Architectural lighting, chromaticity and environment. *Ingineria Iluminatului 12* (2003), 13–18. Technical University of Cluj-Napoca, Tempus-Phare CME-03551-97 Program. ISSN 1454-5837.
- [9] POP, H. F. The future of Computer Science in the current context of the Romanian society. Babeş-Bolyai University, Faculty of Mathematics and Computer Science Research Seminars, Seminar on Computer Science, Preprint, 2 (1997), 7–10.
- [10] POP, H. F. Using ActiveX technologies for providing Internet accessibility to existing computational applications. Babeş-Bolyai University, Faculty of Mathematics and Computer Science Research Seminars, Seminar on Computer Science, Preprint, 2 (1998), 1–14.
- [11] POP, H. F. Reţeaua Internet, mijloc de comunicare si sursă de informare (internet, communication medium and information source). *Ingineria Iluminatului 1* (1999), 29–34. Technical University of Cluj-Napoca, Tempus-Phare CME-03551-97 Program. ISSN 1454-5837.
- [12] POP, H. F., AND DUMITRESCU, D. Fuzzy hierarchical classification with adaptive prototypes. *Fuzzy* Systems & A.I. Magazine 1, 1 (1991), 17–20.
- [13] POP, H. F., AND POP, F. LSD Lighting Systems Design un program pentru proiectarea sistemelor de iluminat (LSD — Lighting Systems Design — software for designing of lighting systems). *Ingineria Iluminatului* 4 (2000), 74–79. Tehnical University of Cluj-Napoca, Tempus-Phare CME-03551-97 Program. ISSN 1454-5837.
- [14] POP, H. F., AND POP, L. G. Scientific education: the logic denominator. Didactica Mathematica (Formerly Proceedings of the National Seminar "Didactica Matematicii") 25, 2 (2007), 75–84.
- [15] POP, M., POP, H. F., AND POP, F. Appraisal of indoor lighting systems quality. *Ingineria Iluminatului* 22 (2008), 37–48. Technical University of Cluj-Napoca, ISSN 1454-5837.

#### **III.2** Papers in proceedings of national conferences

- COROIU, A. M., GĂCEANU, R. D., AND POP, H. F. Ordinal data analysis using agglomerative clustering algorithms. In *Knowledge Engineering Principles and Techniques 2015, Book of Abstracts* (Cluj-Napoca, Romania, July 2 2015), M. Frenţiu, H. F. Pop, and S. Motogna, Eds., Babeş-Bolyai University, pp. 240–246.
- [2] GEANTĂ, M., POP, H. F., AND GLADWIN, R. Echilibre în soluții apoase. Programe vizuale sub Delphi (Equilibria in water solutions. Visual programs in Delphi). In Sesiunea jubiliară "50 de ani de la înființarea Facultății de Chimie Industrială și Ingineria Mediului din Timişoara" (Aniversary conference "50 years from the appearance of the Faculty of Industrial Chemistry and Environmental Engineering from Timişoara") (Politechnic University of Timişoara, October 29 – 30 1998).
- [3] POP, F., AND POP, H. F. Aplicații privind proiectarea asistată de calculator a bilanțurilor energetice (applications concerning the computer aided design of the energetical balance sheets). In Simpozionul "Instalații pentru construcții şi confort ambiental ("Installations for Buildings and Ambiental Comfort" Symposium) (Timisoara, April 2–3 1992), pp. 299–302.
- [4] POP, H. F., AND FRENȚIU, M. Detecting mistakes in students measurement projects. In Symposium "Colocviul Academic Clujean de Informatică" (Babeş-Bolyai University, Cluj-Napoca, Romania, June 1-2 2005), pp. 105–110.
- [5] POP, H. F., AND SÂRBU, C. Theoretical approach of Fuzzy Clustering for Chemistry. In Sesiunea jubiliară "50 de ani de la înființarea Facultății de Chimie Industrială şi Ingineria Mediului din Timişoara" (Aniversary conference "50 years from the appearance of the Faculty of Industrial Chemistry and Environmental Engineering from Timişoara") (Politechnic University of Timişoara, October 29 – 30 1998).
- [6] SÂRBU, C., AND POP, H. F. Applications of Fuzzy Clustering in Chemistry. In Sesiunea jubiliară "50 de ani de la înființarea Facultății de Chimie Industrială și Ingineria Mediului din Timişoara" (Aniversary conference "50 years from the appearance of the Faculty of Industrial Chemistry and Environmental Engineering from Timişoara") (Politechnic University of Timişoara, October 29 – 30 1998).
- [7] TÂMBULEA, L., AND POP, H. F. A formal approach of web sites management. In Symposium "Zilele Academice Clujene" (Babeş-Bolyai University, Cluj-Napoca, Romania, July 5 2006), pp. 66–72.

# **IV** Books with accredited publishers

- [1] BLAGA, P. A., AND POP, H. F. *HTFX* 2*e*. Editura Tehnică, București, 1999. 364 pages. ISBN 973-31-1290-5.
- [2] CZIBULA, G., AND POP, H. F. Elemente Avansate de Programare în Lisp şi Prolog. Aplicații în Inteligența Artificială (Advanced Elements of Programming in Lisp and Prolog. Applications in Artificial Intelligence), 2 ed. Editura Albastră, Cluj-Napoca, 2012. 270 pages.
- [3] FRENŢIU, M., ..., POP, H. F., ET AL. Programare Pascal. Programe ilustrative. Probleme propuse (Pascal Programming. Illustrative Programs. Proposed Problems). Editura "Promedia Plus", Cluj-Napoca, 1995. 16 chapters, 228 pages. Personal contribution: chapter 11, 19 pages. ISBN 973-96862-1-4.
- [4] FRENŢIU, M., AND POP, H. F. Fundamentals of Programming. Cluj University Press, 2006. 220 pag. ISBN 973-610-453-2.
- [5] FRENȚIU, M., POP, H. F., AND SERBAN, G. *Programming Fundamentals*. Cluj University Press, 2006. 232 pag.
- [6] HOROWITZ, O., SÂRBU, C., AND POP, H. F. Clasificarea Raţională a Elementelor Chimice. Editura Dacia, Cluj-Napoca, 2000. 258 pagini. ISBN 973-35-1006-8.
- [7] KÁSA, Z., AND POP, H. F. Comunicare în Internet (Communication in Internet). Editura Albastră, Cluj-Napoca, 1997. 130 pages. ISBN 973-9215-63-7.
- [8] POP, H. F. Sisteme Inteligente în Probleme de Clasificare (Intelligent Systems in Classification Problems). Editura Mediamira, Cluj-Napoca, 2004. 183 pages. ISBN 973-0-03718-3.
- [9] POP, H. F., AND ŞERBAN, G. Programare în Inteligența Artificială Limbajele Lisp şi Prolog (Programming in Artificial Intelligence – Lisp and Prolog Languages). Editura Albastră, Cluj-Napoca, 2003. 178 pages. 1st Ed. (2003), 2nd Ed. (2004). ISBN 973-650-104-3.
- [10] SÂRBU, C., AND POP, H. F. Fuzzy soft-computing methods and their applications in chemistry. In *Reviews in Computational Chemistry*, K. B. Lipkowitz, R. Larter, and T. R. Cundari, Eds., vol. 20. VCH Publishers, New York, 2004, pp. 249–332. ISBN 0-471-44525-8.
- [11] SERBAN, G., AND POP, H. F. Tehnici de Inteligență Artificială. Abordări Bazate pe Agenți Inteligenți (Artificial Intelligence Techniques. Intelligent Agents Approaches). Editura Mediamira, Cluj-Napoca, 2004. 144 pagini. ISBN 973-0-03717-5.
- [12] SERBAN, G., AND POP, H. F. Elemente Avansate de Programare în Lisp şi Prolog. Aplicații în Inteligența Artificială (Advanced Elements of Programming in Lisp and Prolog. Applications in Artificial Intelligence). Editura Albastră, Cluj-Napoca, 2006. 270 pages. ISBN 973-650-172-8.
- [13] POP, F., ..., POP, H. F., ET AL. Managementul Instalațiilor de Iluminat Curs postuniversitar (The Management of Lighting Installations — Postgraduate Course). Editura Mediamira, Cluj-Napoca, 1998. 12 chapters, 210 pages. Personal contribution: Chapter 11, "Internet şi accesul la informație (Internet and the access to information)", pp. 140–148. ISBN 973-9358-27-6.

# V Other various items

#### V.1 Papers in other publications

- DUMITRESCU, D., LOWY, D. A., ONICIU, L., AND POP, H. F. Classification procedure for selectivity control in acrylonitrile electroreduction. In *The 42nd Meeting of International Society of Electrochemistry* (Montreux, 1991).
- [2] DUMITRESCU, D., AND POP, H. F. Algorithms for convex decomposition of finite fuzzy partitions. In BUFSA'94, Third BUFSA Conference on Fuzzy Logic and Artificial Intelligence (Bucharest, October 27–29 1994).

- [3] LOWY, D. A., DUMITRESCU, D., ONICIU, L., POP, H. F., AND KISS-SZETSI, S. Classification procedure for selectivity control in acrylonitrile electroreduction. In *The 7th International Forum Process Analytical Chemistry (Process Analysis & Control) - IFPAC-SM* (Houston (Galveston), Texas, January 26–27 1993). Abstract no. 35.
- [4] LOWY, D. A., DUMITRESCU, D., POP, H. F., AND ONICIU, L. Mathematical methods for quality control in propionitrile electrosynthesis. In *The 8th International Forum Process Analytical Chemistry (Process Analysis & Control) - IFPAC-SM* (Houston (Montgomery), Texas, January 24–26 1994).
- [5] POP, H. F. Implementarea unor metode de clasificare ierarhică cu mulțimi nuanțate (implementation of some methods of hierarchical clustering with fuzzy sets). In *Buletin de Informare Tehnică* (Sinaia, August 1989).
- [6] POP, H. F., AND DUMITRESCU, D. Fuzzy hierarchical clustering with adaptive prototypes. In *BUFSA'90,* Second International Symposium on Fuzzy Partitions (Iaşi, October 24–27 1990).
- [7] POP, H. F., AND MUŞATESCU, S. Program de identificare a obiectelor pe baza unei mulțimi de atribute asociate (program of objects identification based on the set of associated attributes). In *Buletin de Informare Tehnică* (Buşteni, August 1988), pp. 127–129.

#### V.2 Presentations at national conferences without proceedings volume

- [1] DUMITRESCU, D., LAZAROVICI, G., AND POP, H. F. Fuzzy clustering în arheologie (fuzzy clustering in archaeology). In *Simpozionul de Informatică Aplicată în ştiințele Socio-Umane (Symposium of Computer Science Applied in Socio-Human Sciences)* (Cluj-Napoca, September 1989).
- [2] DUMITRESCU, D., LAZAROVICI, G., AND POP, H. F. Aplicații ale clasificării multidimensionale în arheologie (applications of the multidimensional clustering in archaeology). In *Al Treilea Simpozion Național de Arheometrie (Third National Symposium of Archaeometry)* (Cluj-Napoca, June 14–15 1990).
- [3] DUMITRESCU, D., AND POP, H. F. Algoritmi de clasificare adaptivă (adaptive clustering algorithms). In Simpozionul "Informatica şi Aplicațiile Sale", Zilele Academice Clujene ("Computer Science and its Applications" Symposium, Cluj Academic Days) (Cluj-Napoca, October 12–17 1992).
- [4] DUMITRESCU, D., AND POP, H. F. Clasificare nuanțată calitativă în arheologie (qualitative fuzzy clustering in archaeology). In Al Cincilea Simpozion Național de Arheometrie (Fifth National Symposium of Archaeometry) (Cluj-Napoca, March 27–28 1992).
- [5] DUMITRESCU, D., AND POP, H. F. O nouă clasă de algoritmi de instruire folosind reţele neuronale (a new class of training algorithms using neural networks). In Simpozionul "Informatica şi Aplicațiile Sale", Zilele Academice Clujene ("Computer Science and its Applications" Symposium, Cluj Academic Days) (Cluj-Napoca, October 25–30 1993).
- [6] MEDELEŢ, F., AND POP, H. F. Clasificarea nuanțată a descoperirilor monetare din epoca Latene în Banat (fuzzy clustering of monetary discoveries of latene epoque in Banat). In Al Patrulea Simpozion Național de Arheometrie (Fourth National Symposium of Archaeometry) (Cluj-Napoca, September 19–20 1991).
- [7] PAKI, A., AND POP, H. F. Baze de date pentru clasificarea şi datarea inscripţiilor (databases for clustering and dating of inscriptions). In Al Patrulea Simpozion Naţional de Arheometrie (Fourth National Symposium of Archaeometry) (Cluj-Napoca, September 19–20 1991).
- [8] POP, F., BEU, D., AND POP, H. F. Reprezentarea computerizată a planurilor de instalații electrice. In Simpozionul "Progresele în ştiințele Tehnice", Zilele Academice Clujene (Cluj-Napoca, 12–17 Octombrie 1992).
- [9] POP, H. F. Clasificatori nuanțați supervizați (supervised fuzzy classifiers). In Simpozionul "Informatica și Aplicațiile Sale", Zilele Academice Clujene ("Computer Science and its Applications" Symposium, Cluj Academic Days) (Cluj-Napoca, October 17–29 1994).
- [10] POP, H. F. Algoritmul de regresie nuanțată (the fuzzy regression algorithm). In Simpozionul "Informatica și Aplicațiile Sale", Zilele Academice Clujene ("Computer Science and its Applications" Symposium, Cluj Academic Days) (Cluj-Napoca, October 26–37 1995).

- [11] POP, H. F., AND DUMITRESCU, D. Clasificare în bazele de cunoștințe și formarea conceptelor (classification in knowledge basis and in formation of concepts). In *13th CONDINF Symposium* (Cluj-Napoca, June 1989).
- [12] POP, H. F., AND DUMITRESCU, D. Problema validității claselor (cluster validity problem). In Simpozionul "Informatica şi Aplicațiile Sale", Zilele Academice Clujene ("Computer Science and its Applications" Symposium, Cluj Academic Days) (Cluj-Napoca, October 14–19 1991).
- [13] POP, H. F., AND DUMITRESCU, D. Algoritmi pentru descompunerea convexă a partițiilor nuanțate finite (algorithms for convex decomposition of finite fuzzy partitions). In Simpozionul "Informatica şi Aplicațiile Sale", Zilele Academice Clujene ("Computer Science and its Applications" Symposium, Cluj Academic Days) (Cluj-Napoca, October 17–29 1994).
- [14] POP, H. F., AND SOSA, D. Program de calcul pentru stabilirea necesarului de căldură (computer program for establishing the necessary of heat). In *Simpozionul ştiințific de Construcții Climaterice şi Balneare* (*Scientifical Symposium of Balnear and Climateric Buildings*) (Oradea, October 27–28 1989).

#### V.3 Didactical notes for courses

- FRENŢIU, M., ..., POP, H. F., ET AL. Bazele Informaticii, Culegere de Probleme (The Basis of Computer Science, Problem Book). Babeş-Bolyai University, Cluj-Napoca, 1992. 16 chapters, 187 pages. Personal contribution: chapter 11, 20 pages.
- [2] KÁSA, Z., AND POP, H. F. Reţele de Calculatoare II (Computer Networks II). Centrul de Formare Continuă şi Învăţământ la Distanţă, Universitatea Babeş-Bolyai, Cluj-Napoca, 1999. 130 pages.
- [3] POP, F., GÂRBU, A., MOCA, M., COSTEA, V., CATANĂ, D., AND POP, H. F. Proiectarea Instalațiilor Electrice de Joasă Tensiune (Designing of the Low-Voltage Electrical Installations). Institutul Politehnic, Cluj-Napoca, 1990. 16 chapters, 4 appendices, 334 pages. Personal contribution: Chapter 15, "Programe de calcul pentru instalații electrice (Software for Electrical Installations)", 24 pages.
- [4] POP, H. F. Programare Funcțională şi Logică (Functional and Logic Programming). Babeş-Bolyai University, Cluj-Napoca, 1998. 149 pages.
- [5] POP, H. F. *Inteligență Artificială Note de curs (Artificial Intelligence Lecture notes ).* Centrul de Formare Continuă și Învățământ la Distanță, Universitatea Babeș-Bolyai, Cluj-Napoca, 1999. 1st Ed. (180 pages).
- [6] POP, H. F., AND ŞERBAN, G. Inteligență Artificială Note de curs (Artificial Intelligence Lecture notes). Centrul de Formare Continuă şi Învățământ la Distanță, Universitatea Babeş-Bolyai, Cluj-Napoca, 2000–2003. 2nd Ed. (2000, 210 pages), 3rd Ed. (2001, 223 pages), 4th Ed. (2002, 190 pages), 5th. Ed. (2003, 190 pages).

#### V.4 Technical reports

- [1] POP, H. F. Developing software: programming for what? Tech. Rep. TR-HH-6-99, Natural Language Research Group, Department of Computer Science, University of Hamburg, June 1999.
- [2] POP, H. F. Fuzzy Clustering selected papers. Tech. Rep., Natural Language Division, Department of Computer Science, University of Hamburg, November 1999.
- [3] POP, H. F. A short introduction to SunOS. Tech. Rep. TR-HH-7-99, Natural Language Division, Department of Computer Science, University of Hamburg, June 1999.
- [4] POP, H. F. Self-Organizing Map in text mining. Tech. Rep., Natural Language Division, Department of Computer Science, University of Hamburg, June 2000.
- [5] POP, H. F. A short introduction to MacOS. Tech. Rep., Natural Language Division, Department of Computer Science, University of Hamburg, July 2000.
- [6] POP, H. F. A Soft-Computing approach to NLP. Tech. Rep., Natural Language Division, Department of Computer Science, University of Hamburg, May 2000.
- [7] POP, H. F. *Indrumar de utilizare LTEX (LTEX users' memo)*. Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca, June 1993. Small series.

# **VI** Software Products

- [1] POP, H. F. Software Package for Design and Analysis of Low Voltage Electrical Installations, 1990–1994.
- [2] POP, H. F. SAADI System for Automatic Analysis of Data and for their Interpretation, 1991–1995. Software for characteristics reduction, fuzzy clustering, fuzzy regression, fuzzy training and fuzzy crossclassification. Available under MS-DOS.
- [3] POP, H. F. HPTEX MS-DOS Turbo-Vision like text editor with a user-friendly LATEX interface, 1994– 1995.
- [4] POP, H. F. LIGHT Software package for interior and exterior lighting design, 1994–1995.
- [5] POP, H. F. HPTEXW Windows text editor with a user-friendly LATEX interface, 1995.
- [6] POP, H. F. SAADIW System for Automatic Analysis of Data and for their Interpretation, 1996–1998. Software for characteristics reduction, fuzzy clustering, fuzzy regression, fuzzy training and fuzzy crossclassification. Available under Windows.
- [7] POP, H. F. SADIC for wxWindows System for Automatic Data Investigation and Classification, 1999–2011. Software for characteristics reduction, fuzzy clustering, fuzzy regression, fuzzy training, fuzzy cross-classification and multivariate fuzzy analysis, available under Windows, Unix/Linux, MacOS.
- [8] POP, H. F. SADIC for wxWidgets System for Automatic Data Investigation and Classification, 2012–2016. Software for characteristics reduction, fuzzy clustering, fuzzy regression, fuzzy training, fuzzy cross-classification and multivariate fuzzy analysis, available under Windows, Unix/Linux, MacOS.
- [9] POP, H. F., AND GEANTĂ, M. CHAN Didactical demonstrative software package for applications of Analytical Chemistry, 1998.

# **VII** Discursive reviews

# For Acta Aplicandae Mathematicae Survey, an International Journal on Applying Mathematics and Mathematical Applications

- [1] BRANHAM, JR., R. L. Scientific Data Analysis, An Introduction to Overdetermined Systems. Springer Verlag, 1990.
- [2] CHAUVIN, B., FLAJOLET, P., GARDY, D., AND MOKKADEM, A., Eds. *Mathematics and Computer Science II: Algorithms, Trees, Combinatorics and Probabilities.* Birkhäuser Verlag, Basel-Boston-Berlin, 2002.
- [3] DVORAK, I., AND HOLDEN, A. V. Mathematical Approaches to Brain Functioning Diagnostics. Manchester University Press, 1991.
- [4] ERNEST, P., Ed. Constructing Mathematical Knowledge: Epistemology and Mathematical Education. The Falmer Press, 1994.
- [5] GOLES, E., AND MARTINEZ, S., Eds. Cellular Automata, Dynamical Systems and Neural Networks. Kluwer Academic Publishers, 1994.
- [6] GRABISCH, M., NGUYEN, H. T., AND WALKER, E. A. Fundamentals of Uncertainty Calculi with Applications to Fuzzy Inference. Kluwer Academic Publishers, 1995.
- [7] RODABAUGH, S. E., KLEMENT, E. P., AND HOHLE, U. Applications of Category Theory to Fuzzy Subsets. Kluwer Academic Publishers, 1991.
- [8] VAN DALEN, D. Logic and Structure, Third ed. Springer Verlag, 1994.
- [9] YUHAS, B., AND ANSARI, N., Eds. Neural Networks in Telecommunications. Kluwer Academic Publishers, 1994.

## VIII Activity during studies

#### VIII.1 Theses

- [1] POP, H. F. Adaptive prototypes in fuzzy clustering. Master's thesis, Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca, 1991.
- [2] POP, H. F. Intelligent Systems in Classification Problems. PhD thesis, Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca, 1995.

#### VIII.2 Prizes at programming contests

- [1] "Grigore Moisil" Programming Contest. Iaşi, April 1988. Fourth Prize.
- [2] National Computers Contest. Craiova, April 1988. Special Prize.
- [3] "Grigore Moisil" Programming Contest. Iaşi, April 1989. Second Prize.
- [4] "Grigore Moisil" Programming Contest. Iași, April 1991. Third Prize.

#### VIII.3 Prizes at scientifical conferences or national computer camps

- [1] National Computer Camp. Buşteni, August 1988. Fourth Prize.
- [2] National Computer Camp. Sinaia, August 1989. Fourth Prize.
- [3] Students Scientifical Conference, University Level. Cluj-Napoca, May 1989. Second Prize.
- [4] National Students Computer Science Conference. Iasi, April 1990. Second Prize.
- [5] National Students Computer Science Conference. Iaşi, April 1991. Second Prize.

#### VIII.4 Conferenced papers

- [1] POP, H. F. Fuzzy hierarchical clustering methods (Romanian). In *Students Scientifical Conference* (Cluj-Napoca, May 1989).
- [2] POP, H. F. Hierarchical simultaneous clustering with fuzzy sets (Romanian). In *The 14th National Students Computer Science Conference* (Iaşi, April 1989).
- [3] POP, H. F. Prototypes in fuzzy clustering (Romanian). In *The 15th National Students Computer Science Conference* (Iaşi, April 1990).
- [4] POP, H. F. Fuzzy hierarchical clustering with adaptive prototypes (Romanian). In *The 16th National Students Computer Science Conference* (Iaşi, April 1991).
- [5] POP, H. F., AND INDOLEANU, R. Computer programs for electrical installations (Romanian). In *The 19th National Students Conference* (Timişoara, November 1988).