



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **POP, Horia Florin**
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E-mail hffpop@cs.ubbcluj.ro, hffpop@hffpop.ro
Nationality Romania
Date of birth April 20, 1968
Gender Male

Desired employment Occupational field

Professor of Computer Science, Babeş-Bolyai University

Work experience

Dates	Since October 2006
Occupation or position held	PhD supervisor
Main activities and responsibilities	Research activity
Name and address of employer	Babeş-Bolyai University, Faculty of Mathematics and Computer Science
Type of business or sector	Higher education
Dates	Since February 2004
Occupation or position held	Profesor universitar
Main activities and responsibilities	Didactic and research activity
Name and address of employer	Babeş-Bolyai University, Faculty of Mathematics and Computer Science
Type of business or sector	Higher education
Dates	February 1998 – February 2004
Occupation or position held	Associate professor
Main activities and responsibilities	Didactic and research activity
Name and address of employer	Babeş-Bolyai University, Faculty of Mathematics and Computer Science
Type of business or sector	Higher education
Dates	October 1996 - February 1998
Occupation or position held	Lecturer professor
Main activities and responsibilities	Didactic and research activity
Name and address of employer	Babeş-Bolyai University, Faculty of Mathematics and Computer Science
Type of business or sector	Higher education
Dates	October 1994 – September 1996
Occupation or position held	Asistant professor
Main activities and responsibilities	Didactic and research activity
Name and address of employer	Babeş-Bolyai University, Faculty of Mathematics and Computer Science

Type of business or sector	Higher education																																										
Dates	October 1991 – September 1994																																										
Occupation or position held	Teaching assistant																																										
Main activities and responsibilities	Didactic and research activity																																										
Name and address of employer	Babeş-Bolyai University, Faculty of Mathematics and Computer Science																																										
Type of business or sector	Higher education																																										
Dates	August 1991 – September 1991																																										
Occupation or position held	Computer scientist																																										
Main activities and responsibilities	Programs development and computer science research																																										
Name and address of employer	History Museum of Transylvania																																										
Type of business or sector	Computer Science																																										
Education and training																																											
Dates	January 1992 – November 1995																																										
Title of qualification awarded	Doctor in Mathematics, specialization Computer Science																																										
Principal subjects/occupational skills covered	Doctoral studies in artificial intelligence and soft computing																																										
Name and type of organisation providing education and training	Babeş-Bolyai University, Faculty of Mathematics and Computer Science Public institution																																										
Level in national or international classification	Doctoral studies ISECD Level 6																																										
Dates	September 1987 – July 1991																																										
Title of qualification awarded	B.Sc. Degree Diploma																																										
Principal subjects/occupational skills covered	Specialization Computer Science, lectures in the fields of Mathematics and Computer Science																																										
Name and type of organisation providing education and training	Babeş-Bolyai University, Faculty of Mathematics and Computer Science Public institution																																										
Level in national or international classification	Studii de licenţă ISECD Level 5																																										
Personal skills and competences																																											
Mother tongue(s)	Romanian																																										
Other language(s)																																											
Self-assessment																																											
European level (*)																																											
English	<table border="1"><thead><tr><th colspan="2">Understanding</th><th colspan="2">Speaking</th><th colspan="2">Writing</th></tr><tr><th colspan="2">Listening</th><th colspan="2">Reading</th><th colspan="2">Spoken interaction</th></tr><tr><th colspan="2">C2 Experienced user</th><th colspan="2">C2 Experienced user</th><th colspan="2">C2 Experienced user</th></tr></thead><tbody><tr><td>C2</td><td>Experienced user</td><td>C2</td><td>Experienced user</td><td>C2</td><td>Experienced user</td></tr><tr><td>C2</td><td>Experienced user</td><td>C2</td><td>Experienced user</td><td>B2</td><td>Independent user</td></tr><tr><td></td><td></td><td></td><td></td><td>B2</td><td>Independent user</td></tr><tr><td></td><td></td><td></td><td></td><td>B2</td><td>Independent user</td></tr></tbody></table>	Understanding		Speaking		Writing		Listening		Reading		Spoken interaction		C2 Experienced user		C2 Experienced user		C2 Experienced user		C2	Experienced user	B2	Independent user					B2	Independent user					B2	Independent user								
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Social skills and competences	Capacity to adapt to multicultural environments, obtained via academic mobilities abroad																																										
Organisational skills and competences	During 2016-2020 I was the Vice-President of the UBB Senate During 2012-2016 I was the President of the UBB Senate Committee on Curriculum During 2004-2012 I was Vice-Dean of the Faculty of Mathematics and Computer Science During 2012-2020 I was the 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	<p>Citation indices</p> <table> <tr> <td>Hirsh index (ISI)</td> <td>12</td> </tr> <tr> <td>Hirsch index (Scopus)</td> <td>12</td> </tr> <tr> <td>Hirsch index (Google Scholar)</td> <td>15</td> </tr> </table> <p>Summary of scientific publications</p> <table> <tr> <td>Papers in journals from ISI + Scopus</td> <td>35</td> </tr> <tr> <td>Papers in proceedings from ISI + CORE + Scopus</td> <td>26</td> </tr> <tr> <td>Papers in international journals</td> <td>37</td> </tr> <tr> <td>Papers in proceedings of international conferences</td> <td>23</td> </tr> <tr> <td>Papers in national journals</td> <td>14</td> </tr> <tr> <td>Papers in proceedings of national conferences</td> <td>9</td> </tr> <tr> <td>Books with accredited publishing houses</td> <td>13</td> </tr> <tr> <td>Software for scientific use</td> <td>9</td> </tr> <tr> <td>Independent citations</td> <td>433</td> </tr> </table> <p>Professor and habilitation criteria, as described in OMECS 6129/20.12.2016</p> <table> <tr> <td>Minimal values</td> <td>Self-evaluation</td> </tr> <tr> <td>Perspective B, Scientific production</td> <td></td> </tr> <tr> <td>A[*]+A+B+C ≥ 56 pts</td> <td>172 pts</td> </tr> <tr> <td>A[*]+A ≥ 24 pts</td> <td>138 pts</td> </tr> <tr> <td>A[*]+A+B ≥ 40 pts</td> <td>142 pts</td> </tr> <tr> <td>Perspective C, Impact of results</td> <td></td> </tr> <tr> <td>A[*]+A+B+C+D ≥ 120 pts</td> <td>1207 pts</td> </tr> <tr> <td>A[*]+A+B ≥ 40 pts</td> <td>870 pts</td> </tr> <tr> <td>Perspective D, Academic performance</td> <td></td> </tr> <tr> <td>60 pts</td> <td>249 pts</td> </tr> <tr> <td colspan="2">At least one project, with a team of at least two members, obtained by (inter-) national competition</td></tr> </table> <p>For other information please access the personal web site, at http://hfpop.ro.</p>	Hirsh index (ISI)	12	Hirsch index (Scopus)	12	Hirsch index (Google Scholar)	15	Papers in journals from ISI + Scopus	35	Papers in proceedings from ISI + CORE + Scopus	26	Papers in international journals	37	Papers in proceedings of international conferences	23	Papers in national journals	14	Papers in proceedings of national conferences	9	Books with accredited publishing houses	13	Software for scientific use	9	Independent citations	433	Minimal values	Self-evaluation	Perspective B, Scientific production		A [*] +A+B+C ≥ 56 pts	172 pts	A [*] +A ≥ 24 pts	138 pts	A [*] +A+B ≥ 40 pts	142 pts	Perspective C, Impact of results		A [*] +A+B+C+D ≥ 120 pts	1207 pts	A [*] +A+B ≥ 40 pts	870 pts	Perspective D, Academic performance		60 pts	249 pts	At least one project, with a team of at least two members, obtained by (inter-) national competition	
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List of papers

Dr. Horia F. Pop, Professor

I Papers in publications from *ISI + CORE + Scopus*

I.1 Journals indexed in *ISI Web of Science*

- [1] C. Sârbu, D. Dumitrescu, and Horia F. Pop. Optimum selection and combination of solvent systems in thin layer chromatography using the fuzzy sets theory. *Revista de Chimie*, 44(5):450–459, 1993.
- [2] D. Dumitrescu, C. Sârbu, and Horia F. Pop. A fuzzy divisive hierarchical clustering algorithm for the optimal choice of set of solvent systems. *Analytical Letters*, 27(5), 1994. 1031–1054.
- [3] D. Dumitrescu and Horia F. Pop. Convex decomposition of fuzzy partitions, I. *Fuzzy Sets and Systems*, 73(3):365–376, 1995. ISSN 0165-0114.
- [4] D. Dumitrescu, Horia F. Pop, and Costel Sârbu. Fuzzy hierarchical cross-classification of Greek muds. *Journal of Chemical Information and Computer Sciences*, 35:851–857, 1995.
- [5] Horia F. Pop, D. Dumitrescu, and Costel Sârbu. A study of Roman pottery (terra sigillata) using hierarchical fuzzy clustering. *Analytica Chimica Acta*, 310(2):269–279, 1995.
- [6] Horia F. Pop and Costel Sârbu. A new fuzzy regression algorithm. *Analytical Chemistry*, 68(5):771–778, 1996.
- [7] Horia F. Pop, Costel Sârbu, Ossi Horowitz, and D. Dumitrescu. A fuzzy classification of the chemical elements. *Journal of Chemical Information and Computer Sciences*, 36(3):465–482, 1996.
- [8] Costel Sârbu, Ossi Horowitz, and Horia F. Pop. 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):1098–1108, 1996.
- [9] Horia F. Pop and C. Sârbu. Fuzzy regression. i: The heteroskedastic case. *Revista de Chimie*, 48(8):732–737, 1997.
- [10] Horia F. Pop and Costel Sârbu. The fuzzy hierarchical cross-clustering algorithm. Improvements and Comparative study. *Journal of Chemical Information and Computer Sciences*, 37(3):510–516, 1997.
- [11] C. Sârbu and Horia F. Pop. Fuzzy regression. ii: Outliers cases. *Revista de Chimie*, 48(10–11):888–891, 1997.
- [12] D. Dumitrescu and Horia F. Pop. Convex decomposition of fuzzy partitions, II. *Fuzzy Sets and Systems*, 96(1):111–118, 1998. ISSN 0165-0114.
- [13] Thomas R. Cundari, Jun Deng, Horia F. Pop, and Costel Sârbu. 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):1052–1061, 2000.
- [14] Ossi Horowitz, Horia F. Pop, and Costel Sârbu. Recognition of the forms applied to chemical elements. *Revista de Chimie*, 51(1):17–29, 2000.
- [15] Costel Sârbu and Horia F. Pop. Fuzzy clustering analysis of the first 10 MEIC chemicals. *Chemosphere*, 40(5):513–520, 2000.

- [16] Costel Sârbu and Horia F. Pop. Fuzzy classification and comparison of some Romanian and American coals. *MATCH — Communications in Mathematical and in Computer Chemistry*, 44:387–400, October 2001.
- [17] Costel Sârbu and Horia F. Pop. Fuzzy robust estimation of central location. *Talanta*, 54:125–130, 2001.
- [18] Thomas R. Cundari, Costel Sârbu, and Horia F. Pop. 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):1363–1369, 2002.
- [19] Costel Sârbu and Horia F. Pop. Fuzzy soft-computing methods and their applications in chemistry. In K. B. Lipkowitz, R. Larmer, and T. R. Cundari, editors, *Reviews in Computational Chemistry*, volume 20, pages 249–332. VCH Publishers, New York, 2004. ISBN 0-471-44525-8.
- [20] Costel Sârbu and Horia F. Pop. Principal Component Analysis versus Fuzzy Principal Component Analysis. A case study: The quality of Danube water (1985-1996). *Talanta*, 65:1215–1220, 2005.
- [21] Costel Sarbu, Horia F. Pop, R. S. Elekes, and G. Covaci. Intelligent disease identification based on discriminant analysis. *Revista de Chimie*, 59(11):1237–1241, 2008.
- [22] Horia F. Pop, Jurgen W. Einax, and Costel Sârbu. Classical and fuzzy principal component analysis of some environmental samples concerning the pollution with heavy metals. *Chemometrics and Intelligent Laboratory Systems*, 97(1):25–32, 2009.
- [23] Horia F. Pop and Costel Sârbu. A new fuzzy discriminant analysis method. *MATCH — Communications in Mathematical and in Computer Chemistry*, 69(2):391–412, 2013.
- [24] Radu D. Găceanu and Horia F. Pop. Medical procedure breaches detection using a fuzzy clustering approach. *Open Computer Science*, 4(3):127–140, 2014. (ISI Emerging Sources Citation Index)).
- [25] Horia F. Pop. The Best Writing on Mathematics 2014 (by Mircea Pitici). *Studia Universitatis Babeş-Bolyai, Mathematica*, 59(3):393–394, 2014. (Book review. ISI Emerging Sources Citation Index).
- [26] Horia F. Pop, Costel Sârbu, Ana Ștefănescu, Aurel Bizo, and Tudor Lucian Pop. Prognostic factors in liver failure in children by discriminant analysis of clinical data. A chemometric approach. *Studia Universitatis Babeş-Bolyai, Chemia*, 60(2):101–108, 2015.
- [27] Horia F. Pop. The Best Writing on Mathematics 2015 (by Mircea Pitici). *Studia Universitatis Babeş-Bolyai, Mathematica*, 61(1):123–124, 2016. (Book review. ISI Emerging Sources Citation Index).
- [28] I. M. Simion, H. F. Pop, and C. Sârbu. Spectrophotometric characterization of Roumanian medicinal herbs assisted by robust chemometrics expertise. *Revue Roumaine de Chimie*, 63(5-6):489–496, 2018.
- [29] Grigore Călugăreanu and Horia F. Pop. Are nil-clean 3x3 integral matrices, exchange? *Anal. St. Univ. Al. I. Cuza, Series Math.*, 66, 2020. To appear.
- [30] Grigore Călugăreanu and Horia F. Pop. Jacobson's lemma fails for nil-clean 2x2 integral matrices. *Anal. St. Univ. Ovidius Cta., Series Math.*, 28(3), 2020. To appear.
- [31] Grigore Călugăreanu and Horia F. Pop. Trace 1, 2x2 matrices over principal ideal domains are exchange. *Carpathian J. of Math.*, 36, 2020. To appear.
- [32] Alexandrina Guidea, Radu D. Găceanu, Horia F. Pop, and Costel Sârbu. Mineral waters classification using fuzzy linear discriminant analysis. *Studia UBB Chemia*, 65(2), 2020. To appear.
- [33] Illeana M. Simion, Augustin-C. Mot, Radu D. Găceanu, Horia F. Pop, and Costel Sârbu. Characterization and classification of medicinal plant extracts according to their antioxidant activity using high-performance liquid chromatography and multivariate analysis. *Studia UBB Chemia*, 65(1):71–82, 2020.
- [34] Arnold Szederjesi-Dragomir, Radu D. Găceanu, Horia F. Pop, and Costel Sârbu. Experiments on rough sets clustering with different similarity measures. *IPSI BgD Transactions on Internet Research (TIR)*, 16, 2020. To appear (ISI Emerging Sources Citation Index).

I.2 Journals indexed in Scopus

- [1] Horia F. Pop, Tudor L. Pop, and Costel Sârbu. Assessment of heart disease using fuzzy classification techniques. *The Scientific World Journal*, 1:369–390, 2001. ISSN 1537-744X.

I.3 Conferences indexed in ISI Web of Science

- [1] Militon Frentiu and Horia F. Pop. Tracking mistakes in software measurement using fuzzy data analysis. In *4-th International Conference RoEduNet Romania*, pages 150–157, Sovata, Târgu-Mureş, Romania, May 20–22 2005. Organized by the Romanian Education Network RoEduNet and the Petru Maior University, Târgu-Mureş. ISBN 973-7794-26-5.
- [2] Xubo Fei, Shiyong Lu, Horia F. Pop, and Lily R. Liang. GFBA: A genetic fuzzy biclustering algorithm for discovering value-coherent biclusters. *Lecture Notes in Bioinformatics (LNCS)*, (4463):1–12, 2007. International Symposium on Bioinformatics Research and Applications 2007 (ISBRA), May 6–9 2007, Georgia State University, Atlanta. ISBN: 978-3-540-72030-0.
- [3] Horia F. Pop. A tutorial on object-orientedness in functional programming. *Lecture Notes in Computer Science (LNCS)*, (5161):228–249, 2008. 2-nd Central European Functional Programming Summer School (CEFP), Revised Selected Lectures, June 23–30 2007, Babeş-Bolyai University, Cluj-Napoca, Romania. ISBN 978-3-540-88058-5.
- [4] Horia F. Pop and Militon Frentiu. Applications of Principal Components Methods. In Iantovics, BL and Enachescu, C and Filip, FG, editor, *2008 Complexity & Intelligence of the Artificial & Natural Complex Systems, Medical Applications of the Complex Systems, Biomedical Computing*, pages 103–109, Petru Maior Univ. Târgu-Mureş, Romania, November 08–10 2008. Romanian Acad. Bucharest & Petru Maior Univ. Targu-Mures. International Conference on Complexity and Intelligence of the Artificial and Natural Complex Systems - Medical Applications of the Complex Systems Biomedical Computing. ISBN 978-1-4244-3937-9.
- [5] Horia F. Pop and Militon Frentiu. Applications of Principal Components Methods. In Iantovics, B and Enachescu, C and Filip, F, editor, *Complexity in Artificial and Natural Systems*, pages 267–270, Petru Maior Univ. Târgu-Mureş, Romania, November 08–10 2008. International Conference on Complexity and Intelligence of the Artificial and Natural Complex Systems - Medical Applications of the Complex Systems Biomedical Computing. ISBN 978-973-7794-76-5.
- [6] Andreea Vescan, Crina Grosan, and Horia F. Pop. Evolutionary algorithms for the component selection problem. In Tjoa, AM and Wagner, RR, editor, *19-th International Conference on Database and Expert Systems Applications (DEXA 2008)*, 2-nd International Workshop Evolutionary Techniques in Data Processing, pages 509–513, Turin, Italy, September 01-05 2008. ISBN 978-0-7695-3299-8.
- [7] Horia F. Pop and Militon Frentiu. Effort estimation by analogy based on soft computing methods. In *International Conference Knowledge Engineering Principles and Techniques (KEPT). Selected Papers*, pages 239–246. Cluj University Press, Cluj-Napoca, Romania, 2009.
- [8] Camelia Ţerban, Andreea Vescan, and Horia F. Pop. A new component selection algorithm based on metrics and fuzzy clustering analysis. *Lecture Notes in Artificial Intelligence (LNCS)*, (5572):621–628, 2009. 4-th International Conference on Hybrid Artificial Intelligence Systems (HAIS), June 10–12 2009, Salamanca, Spain. ISBN: 978-3-642-02318-7.
- [9] Lisa Tan, Farshad Fotouhi, William Grosky, Horia F. Pop, and Noureddine Mouaddib. Improving similarity join algorithms using fuzzy clustering technique. In *IEEE International Conference on Data Mining Workshops 2009 (ICDM Workshops)*, pages 545–550, Miami, Florida, USA, December 6–9 2009. IEEE Computer Society.
- [10] Camelia Ţerban, Andreea Vescan, and Horia F. Pop. A conceptual framework for component-based system metrics definition. In *9-th RoEduNet IEEE International Conference*, pages 73–78, Lucian Blaga University, Sibiu, Romania, June 24–26 2010. <http://roedu2010.ulbsibiu.ro>.

- [11] Radu D. Găceanu and Horia F. Pop. A fuzzy clustering algorithm for dynamic environments. In *International Conference Knowledge Engineering Principles and Techniques (KEPT). Selected Papers*, pages 119–130. Cluj University Press, Cluj-Napoca, Romania, 2011. ISSN: 2067-1180.
- [12] Alina Miron, S. Ainouz, A. Rogozan, A. Bensrhair, and Horia F. Pop. Stereomatching using radiometric invariant measures. In *International Conference Knowledge Engineering Principles and Techniques (KEPT). Selected Papers*, pages 369–378. Cluj University Press, Cluj-Napoca, Romania, 2011. ISSN: 2067-1180.
- [13] Ovidiu Mircea Ţerban, Alexandre Pauchet, and Horia F. Pop. Recognizing emotions in short text. In Joaquim Filipe and Ana Fred, editors, *International Conference on Agents and Artificial Intelligence (ICAART)*, pages 477–480, Vilamoura, Algrave, Portugal, February 7–8 2012. SciTePress. ISBN: 978-989-8425-95-9.
- [14] Radu D. Găceanu and Horia F. Pop. A parallel clustering approach for hybrid data discovery. In V. Novitzká and Stefan Hudák, editors, *12-th International Conference on Informatics, Informatics 2013*, pages 240–246, Spišská Nová Ves, Slovakia, November 5–7 2013. Slovak Society for Applied Cybernetics and Informatics.
- [15] Maria Nuțu, Horia F. Pop, Radu Martiș, and Claudia Martiș. Principal component analysis for computation of the magnetisation characteristics of synchronous reluctance machine. In *110-th AEIT 2018 International Annual Conference*, pages 583–588, Bari, Italy, October 3–5 2018. IEEE Publishers.
- [16] Maria Nuțu, Horia F. Pop, Claudia Martiș, Sorin-Iulian Cosman, and Andreea Mădălina Nicorici. A machine learning perspective for order reduction in electrical motors modeling. In *2019 21-st International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)*, pages 198–205, Timișoara, Romania, September 4–7 2019. IEEE Publishers.
- [17] Arnold Szederjesi-Dragomir, Radu D. Găceanu, Horia F. Pop, and Costel Sârbu. A comparison study of similarity measures in rough sets clustering. In *15-th International Conference on Informatics, Informatics 2019*, Poprad, Slovakia, November 20-22 2019. Slovak Society for Applied Cybernetics and Informatics. To appear.
- [18] Imre Zsigmond, Andrei Zamfirescu, and Horia F. Pop. Automated evaluation and narratives in computer science education. In *15th International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE 2020)*, Prague, Czech Republic, May 5-6 2020. SciTePress. To appear.

I.4 Conferences indexed in **CORE Conference DB**

- [1] Kilian A. Foth, Wolfgang Menzel, Horia F. Pop, and Ingo Schröder. An experiment in incremental parsing using weighted constraints. In *18-th International Conference on Computational Linguistics (COLING)*, pages 1026–1030, Saarbrücken, Germany, July, 31 – August, 4 2000. ISBN 1-55860-717-X.
- [2] Ingo Schröder, Horia F. Pop, Wolfgang Menzel, and Kilian A. Foth. Learning grammar weights using genetic algorithms. In *Recent Advances in NLP (RANLP)*, pages 235–239, Tzigov Chark, Bulgaria, September 5–7 2001. ISBN 954-90906-1-2.
- [3] Florian Boian, Rareş Boian, Alexandru Vancea, and Horia F. Pop. Distance learning and supporting tools at Babeş-Bolyai University. In *Informatics Education Europe Conference (IEE II)*, pages 332–340, Thessaloniki, Greece, November 29–30 2007. ISBN: 978-960-89629-3-4.
- [4] Alina D. Călin, Horia F. Pop, and Rareş Boian. Improving movement analysis in physical therapy systems based on kinect interaction. In *British Human Computer Interaction Conference (British HCI 2017)*, pages 1–5, University of Sunderland, UK, July 3–6 2017. British Computer Society.

I.5 Conferences indexed in Scopus

- [1] Andreea Vescan and Horia F. Pop. Automatic configuration for the component selection problem. In *5-th International Conference on Soft Computing as Transdisciplinary Science and Technology (CSTST)*, pages 479–483, Cergy-Pontoise, France, October 27–31 2008. ACM, New York, NY, USA. ISBN 978-1-60558-046-3.
- [2] Valentin Georgescu, Horia F. Pop, Oana Tudorache, Horaa Sabău, C. Ciontu, and Victor Strâmbu. Romanian registry on cardiac arrest – a piece in the puzzle – romanian contribution in the EuReCA project. In Jerry Nolan, editor, *10-th Congress of the European Resuscitation Council. Resuscitation, 81/2010*, page S39, Porto, Portugal, December 2–4 2010. Elsevier Publishers. doi:10.1016/j.resuscitation.2010.09.167. (Scopus; Short paper / Poster).
- [3] Camelia Ţerban, Andreea Vescan, and Horia F. Pop. A formal model for component-based system assessment. In *2-nd International Conference on Computational Intelligence, Modelling and Simulation (CIMSim)*, pages 261–266, Bali, September 28–30 2010.
- [4] Horea Sabău, Oana Tudorache, Horia F. Pop, Valentin Georgescu, Victor Strâmbu, Ioana Dimitriu, Mirela Sorina Nicolau, Diana Cimpoeşu, Hadrian Borcea, and Alice Brânzea. Joining the EuReCA — The Romanian Registry on Cardiac Arrest — a year later. In Jerry Nolan, editor, *11-th Congress of the European Resuscitation Council. Resuscitation, 82/2011*, page S19, Valetta, Malta, October 14–15 2011. Elsevier Publishers. doi:10.1016/S0300-9572(11)70075-2. (Scopus; Short paper / Poster).

II International papers

II.1 Papers in international journals

- [1] D. Dumitrescu and Horia F. Pop. A preliminary bibliography on fuzzy clustering and related fields. *Studia Universitatis Babeş-Bolyai, Mathematica*, 35(3):13–24, 1990. (MathSciNet).
- [2] F. Pop, Horia F. Pop, and D. Beu. Interior Lighting Design — computer programs for calculus and graphic representation. *Acta Technica Napocensis, Construcții - Arhitectură*, 35:99–109, 1992. (Index Copernicus, EBSCO).
- [3] Horia F. Pop. A study of the properties of the Fuzzy Relaxation Algorithm. *Studia Universitatis Babeş-Bolyai, Mathematica*, 39(3):67–74, 1994. (MathSciNet).
- [4] Horia F. Pop. Supervised fuzzy classifiers. *Studia Universitatis Babeş-Bolyai, Mathematica*, 40(3):89–100, 1995. (MathSciNet).
- [5] Horia F. Pop. SAADI: Software for fuzzy clustering and related fields. *Studia Universitatis Babeş-Bolyai, Informatica*, 41(1):69–80, 1996. (MathSciNet).
- [6] Horia F. Pop. Improvements of the fuzzy cross-clustering algorithm. *Studia Universitatis Babeş-Bolyai, Informatica*, 42(2):3–12, 1997. (MathSciNet).
- [7] M. Chindriş, T. Colosi, and Horia F. Pop. On the numerical modeling and simulation of the control system for a medium frequency static converter. *Acta Electrotehnica Napocensis*, 39(1):51–56, 1998. (Referativnyi Zhurnal).
- [8] Horia F. Pop. A new regression technique based on fuzzy sets. *Studia Universitatis Babeş-Bolyai, Informatica*, 43(1):3–12, 1998. (MathSciNet).
- [9] Horia F. Pop. Principal Components Analysis based on a fuzzy sets approach. *Studia Universitatis Babeş-Bolyai, Informatica*, 46(2):45–52, 2001. (MathSciNet).
- [10] Militon Frențiu and Horia F. Pop. A study of dependence of software attributes using data analysis techniques. *Studia Universitatis Babeş-Bolyai, Informatica*, 47(2):53–66, 2002. (MathSciNet).

- [11] Ingo Schröder, Horia F. Pop, Wolfgang Menzel, and Kilian A. Foth. Learning the constraints weights of a dependency grammar using genetic algorithms. In *Evolutionary Methods for Design, Optimisation and Control with Applications to Industrial Problems*, pages 243–247. CIMNE, Barcelona, 2002. Series: Theory and engineering applications of computational methods. ISBN: 84-89925-97-6.
- [12] Militon Frențiu, Ionuț Lazăr, and Horia F. Pop. On individual projects in software engineering education. *Studia Universitatis Babeș-Bolyai, Informatica*, 48(2):83–94, 2003. (MathSciNet).
- [13] Horia F. Pop. Data analysis with fuzzy sets: a short survey. *Studia Universitatis Babeș-Bolyai, Informatica*, 49(2):111–122, 2004. (MathSciNet).
- [14] Horia F. Pop. Development of robust fuzzy regression techniques using a fuzzy clustering approach. *Pure Mathematics and Applications*, 14(3):221–232, 2004. (MathSciNet).
- [15] Leon Tâmbulea and Horia F. Pop. Cooperative model for web sites authoring. *Annals of the Tiberiu Popoviciu Seminar, Supplement: International Workshop in Collaborative Systems*:329–336, 2006. ISSN 1584-4536. (MathSciNet).
- [16] Horia F. Pop and Militon Frențiu. On software attributes relationship using a new fuzzy c-bipartitioning method. *Studia Universitatis Babeș-Bolyai, Informatica*, Special Issue:219–226, 2007. International Conference Knowledge Engineering Principles and Techniques (KEPT), June 6–8 2007, Babeș-Bolyai University, Cluj-Napoca, Romania. (MathSciNet).
- [17] Horia F. Pop and Liana G.T. Pop. Education for engineering students: The case of logic. *Annals of the University of Craiova - Electrical Engineering*, (31):259–264, 2007. 6-th International Conference on Electromechanical and Power Systems (SIELMEN 2007), October 4–6 2007, Technical University of Moldova, Chișinău. (Index Copernicus).
- [18] Leon Tâmbulea and Horia F. Pop. Management of web pages using XML documents. *Studia Universitatis Babeș-Bolyai, Informatica*, Special Issue:236–243, 2007. International Conference Knowledge Engineering Principles and Techniques (KEPT), June 6–8 2007, Babeș-Bolyai University, Cluj-Napoca, Romania. (MathSciNet).
- [19] Doina Tătar, Horia F. Pop, Militon Frențiu, and D. Dumitrescu. 1-st international conference on knowledge engineering principles and techniques (KEPT). *Studia Universitatis Babeș-Bolyai, Informatica*, 52(1):3–10, 2007. (MathSciNet).
- [20] Florin Pop and Horia F. Pop. Residential energy efficient lighting. *Acta Electrotechnica Napocensis*, Special Issue:397–403, 2008. 2-nd 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).
- [21] Horia F. Pop and Militon Frențiu. Fuzzy clustering in software engineering. *Analele Universității de Vest, Timișoara, Seria Matematică-Informatică*, 46(2):123–131, 2008. (MathSciNet).
- [22] Horia F. Pop and Militon Frențiu. Fuzzy data analysis for software metrics assessment of student projects. In Ștefan Cobzaș, editor, *Topics in Mathematics, Computer Science and Philosophy. A Festschrift for Wolfgang W. Breckner on his 65-th Anniversary*, pages 23–32, Cluj-Napoca, 2008. Presa Universitară Clujeană. (MathSciNet).
- [23] Camelia Șerban and Horia F. Pop. Software quality assessment using a fuzzy clustering approach. *Studia Universitatis Babeș-Bolyai, Informatica*, 53(2):27–38, 2008. (MathSciNet).
- [24] Camelia Șerban, Andreea Vescan, and Horia F. Pop. Component selection based on fuzzy clustering analysis. *Creative Mathematics and Informatics*, 17(3):505–510, 2008. (MathSciNet).
- [25] Andreea Vescan and Horia F. Pop. Constraint optimization-based component selection problem. *Studia Universitatis Babeș-Bolyai, Informatica*, 53(2):3–14, 2008. (MathSciNet).
- [26] Militon Frențiu and Horia F. Pop. Effort estimation by analogy using a fuzzy clustering approach. *Studia Universitatis Babeș-Bolyai, Informatica*, Special Issue:202–205, 2009. International Conference Knowledge Engineering Principles and Techniques (KEPT), July 2–4 2009, Babeș-Bolyai University, Cluj-Napoca, Romania. (MathSciNet).

- [27] Miltion Frențiu and Horia F. Pop. Overview of fuzzy methods for effort estimation by analogy. *Studia Universitatis Babes-Bolyai, Informatica*, 1:68–74, 2009. (MathSciNet).
- [28] Miltion Frențiu and Horia F. Pop. Common mistakes in writing a scientific papers. *Studia Universitatis Babes-Bolyai, Informatica*, 55(4):3–8, 2010. (MathSciNet).
- [29] Mircea V. Pușcă, Horia F. Pop, M. N. Roman, and V. Iancu. Processing ECG data using multivariate data analysis. *Annals of the Academy of Romanian Scientists - Science and Technology of Information*, 3(2):23–38, 2010.
- [30] Radu D. Găceanu and Horia F. Pop. A context-aware asm-based clustering algorithm. *Studia Universitatis Babes-Bolyai, Informatica*, 56(2):55–60, 2011. (MathSciNet).
- [31] Alina Miron, S. Ainouz, A. Rogozan, A. Bensrhair, and Horia F. Pop. Stereomatching using radiometric invariant measures. *Studia Universitatis Babes-Bolyai, Informatica*, 56(3):91–96, 2011. (MathSciNet).
- [32] Radu D. Găceanu and Horia F. Pop. A fuzzy incremental clustering approach to hybrid data discovery. *Acta Electrotehnica et Informatica*, 12(2):16–23, 2012. (MathSciNet).
- [33] Radu D. Găceanu and Horia F. Pop. An incremental approach to the set covering problem. *Studia Universitatis Babes-Bolyai, Informatica*, 57(2):61–72, 2012. (MathSciNet).
- [34] Andreea Vescan and Horia F. Pop. Automatic criteria-based configuration for the component selection problem. *International Journal of Computer Information Systems and Industrial Management Applications*, 4:641–647, 2012. (IET Inspec).
- [35] Radu D. Găceanu, Horia F. Pop, and Sergiu A. Sotoc. An agent based approach for parallel constraint verification. *Studia Universitatis Babes-Bolyai, Informatica*, 58(3):5–16, 2013. (MathSciNet).
- [36] Adriana M. Coroiu, Radu D. Găceanu, and Horia F. Pop. Discovering patterns in data using ordinal data analysis. *Studia Universitatis Babes-Bolyai, Informatica*, 61(1):78–93, 2016. (MathSciNet).
- [37] Camelia Ţerban, Andreea Vescan, and Horia F. Pop. Preliminary measurements in identifying design flaws. *Studia Universitatis Babes-Bolyai, Informatica*, 62(1):60–74, 2017. (MathSciNet).

II.2 Papers in proceedings of international conferences

- [1] D. Dumitrescu, D. A. Lowy, L. Oniciu, S. Kiss-Szetsi, and Horia F. Pop. Propionitrile electrosynthesis. pattern recognition in the evaluation of gas-chromatographic data. In *41-st Meeting of International Society of Electrochemistry*, pages 58–59, Prague, August 20–25 1990.
- [2] Horia F. Pop and D. Dumitrescu. Fuzzy hierarchical clustering with adaptive prototypes. In *BUFSA '90, 2-nd International Symposium on Fuzzy Partitions*, Iași, October 24–27 1990.
- [3] D. Dumitrescu, D. A. Lowy, L. Oniciu, and Horia F. Pop. Classification procedure for selectivity control in acrylonitrile electroreduction. In *42-nd Meeting of International Society of Electrochemistry*, Montreux, 1991.
- [4] F. Pop and Horia F. Pop. L.I.D. — computer programs for lighting installations design. In *C.I.E. Seminar of Computer Programs for Light and Lighting*, page 80, Vienna, Austria, October 5–9 1992. Publ. No. CIE x005. ISBN 3-900-734-41-0.
- [5] D. A. Lowy, D. Dumitrescu, L. Oniciu, Horia F. Pop, and S. Kiss-Szetsi. Classification procedure for selectivity control in acrylonitrile electroreduction. In *7-th International Forum Process Analytical Chemistry (Process Analysis & Control) - IFPAC-SM*, Houston (Galveston), Texas, January 26–27 1993. Abstract no. 35.
- [6] F. Pop and Horia F. Pop. I.E.L.D. — Interior and Exterior Lighting Design, computer programs for didactic activities. In *2-nd European Conference on Energy-Efficient Lighting RIGHT LIGHT*, pages 666–672, Arnhem, The Netherlands, September 26–29 1993.

- [7] F. M. Boian, Horia F. Pop, S. Iurian, M. Iurian, and A. Vancea. The Unix environment at the Babeş-Bolyai University. In *2-nd International Conference on Open Systems ROSE'94, Technical Sessions*, pages 145–149, Bucharest, Romania, November, 3–5 1994.
- [8] M. Chindriş, T. Coloş, and Horia F. Pop. 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*, pages 181–186, Międzyzdroje, Poland, September 1–3 1994.
- [9] D. Dumitrescu and Horia F. Pop. 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.
- [10] D. A. Lowy, D. Dumitrescu, Horia F. Pop, and L. Oniciu. Mathematical methods for quality control in propionitrile electrosynthesis. In *8-th International Forum Process Analytical Chemistry (Process Analysis & Control) - IFPAC-SM*, Houston (Montgomery), Texas, January 24–26 1994.
- [11] F. Pop, D. Beu, H. F. Pop, and M. Moca. 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*, pages 165–170, Vienna, Austria, December 1–3 1994. ISBN 3-900-734-61-5.
- [12] F. M. Boian, A. Vancea, and Horia F. Pop. Teaching parallel and distributed computing. In *3-rd International Conference on Open Systems ROSE'95, Technical Sessions*, pages 66–74, Bucharest, Romania, November, 1–4 1995.
- [13] Horia F. Pop. Development of robust fuzzy regression techniques using a fuzzy clustering approach. In *4-th Joint Conference on Mathematics and Computer Science*, pages 5–7, Felix-Oradea, Romania, June 5–10 2001. Jointly organized by Babeş-Bolyai University, Cluj and Eötvös Loránd University, Budapest.
- [14] Ingo Schröder, Horia F. Pop, Wolfgang Menzel, and Kilian A. Foth. Learning the constraints weights of a dependency grammar using genetic algorithms. In *Evolutionary Methods for Design, Optimisation and Control with Applications to Industrial Problems (EUROGEN 2001)*, pages 49.1–49.2, Athens, Greece, September 19–21 2001.
- [15] Sandor Orban, Horia F. Pop, and Florin Pop. Chromaticity in architectural lighting – A luminous environment feature. In *ILUMINAT 2003 International Conference (Commision Internationale de l'Eclairage – Comitetul Naţional Român de Iluminat)*, pages 38.1–38.4, Cluj-Napoca, Romania, May 8–9 2003. ISBN 973-9357-44-X.
- [16] Florin Pop, Sandor Orban, and Horia F. Pop. Integration of the architectural lighting on the environment. In *International Conference CONSTRUCTIONS 2003*, pages 407–410, Cluj-Napoca, Romania, May 16–17 2003. ISBN 973-9350-87-9, 973-9350-90-9.
- [17] Horia F. Pop, Augustin Munteanu, and Florin Pop. 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*, pages 293–298, Petru Maior University, Târgu-Mureş, Romania, November 6–7 2003.
- [18] Mihaela Pop, Horia F. Pop, and Florin Pop. LQ – A toolkit for lighting quality evaluation. In *ILUMINAT 2003 International Conference (Commision Internationale de l'Eclairage – Comitetul Naţional Român de Iluminat)*, pages 40.1–40.5, Cluj-Napoca, Romania, May 8–9 2003. ISBN 973-9357-44-X.
- [19] D. Dumitrescu, Laura Sas, Gabriela Ţerban, Alina Câmpan, Adrian S. Dărăbant, Horia F. Pop, and Leon Țâmbulea. Cooperative learning for distributed data mining. In *Collaborative Support Systems in Business and Education, International Workshop*, pages 432–440, Cluj-Napoca, Romania, October 28–29 2005.
- [20] Mihaela Pop, Horia F. Pop, and Florin Pop. Appraisal of indoor lighting systems quality. In *4-th Conference BalkanLight 2008*, pages 165–172. Lighting Engineering Society of Slovenia, October 7–10 2008. ISBN 978-961-248-127-8.

- [21] Andreea Vescan and Horia F. Pop. The component selection problem as a constraint optimization problem. In *Software Engineering Techniques in Progress. 3-rd IFIP TC2 Central and East European Conference on Software Engineering Techniques (CEE-SET 2008)*, pages 208–211, Wroclaw, Poland, October 13–15 2008. Wroclaw University of Technology.
- [22] Radu D. Găceanu and Horia F. Pop. An adaptive fuzzy agent clustering algorithm for search engines. In Horia F. Pop and Antal Bege, editors, *8-th Joint Conference on Mathematics and Computer Science MaCS 2010, Selected papers*, pages 185–196, Komarno, Slovakia, July 14–17 2010. Novadat LTD Publishers. (MathSciNet).
- [23] Radu D. Găceanu and Horia F. Pop. An incremental asm-based fuzzy clustering algorithm. In V. Novitzká and Stefan Hudák, editors, *Proceedings of the 11-th International Conference on Informatics, Informatics 2011*, pages 198–204, Rožňava, Slovakia, November 16–18 2011. Slovak Society for Applied Cybernetics and Informatics. (MathSciNet).

II.3 Book reviews published in international journals

- [1] Horia F. Pop. Scientific Data Analysis, An Introduction to Overdetermined Systems (by R. L. Branham Jr.). *Acta Applicandae Mathematicae Survey*, 1990. (Book review).
- [2] Horia F. Pop. Applications of Category Theory to Fuzzy Subsets (by S. E. Rodabaugh, E. P. Klement, U. Hohle). *Acta Applicandae Mathematicae Survey*, 1991. (Book review).
- [3] Horia F. Pop. Mathematical Approaches to Brain Functioning Diagnostics (by I. Dvorak, A. V. Holden). *Acta Applicandae Mathematicae Survey*, 1991. (Book review).
- [4] Horia F. Pop. Cellular Automata, Dynamical Systems and Neural Networks (by Eric Goles, Servet Martinez, Eds.). *Acta Applicandae Mathematicae Survey*, 1994. (Book review).
- [5] Horia F. Pop. Constructing Mathematical Knowledge: Epistemology and Mathematical Education (by Paul Ernest, Ed.). *Acta Applicandae Mathematicae Survey*, 1994. (Book review).
- [6] Horia F. Pop. Logic and Structure (by Dirk van Dalen). *Acta Applicandae Mathematicae Survey*, 1994. (Book review).
- [7] Horia F. Pop. Neural Networks in Telecommunications (by Ben Yuhas, Nirwan Ansari, Eds.). *Acta Applicandae Mathematicae Survey*, 1994. (Book review).
- [8] Horia F. Pop. Fundamentals of Uncertainty Calculi with Applications to Fuzzy Inference (by Michel Grabisch, Hung T. Nguyen, Elbert A. Walker). *Acta Applicandae Mathematicae Survey*, 1995. (Book review).
- [9] Horia F. Pop. Mathematics and Computer Science II: Algorithms, Trees, Combinatorics and Probabilities (by Brigitte Chauvin, Philippe Flajolet, Danièle Gardy, Abdelkader Mokkadem, Eds.). *Acta Applicandae Mathematicae Survey*, 2002. (Book review).

III National papers

III.1 Papers in national journals

- [1] F. Pop and Horia F. Pop. Programe de calcul pentru instalăriile electrice ale clădirilor (software for electrical installations in buildings). *Instalații în Construcții*, (3–4–5):64–67, 1990.
- [2] Horia F. Pop and D. Dumitrescu. Fuzzy hierarchical classification with adaptive prototypes. *Fuzzy Systems & A.I. Magazine*, 1(1):17–20, 1991.
- [3] F. Pop and Horia F. Pop. 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):60–66, March–April 1993.

- [4] D. Dumitrescu and Horia F. Pop. Algorithms for convex decomposition of finite fuzzy partitions. *Fuzzy Systems & A.I. Magazine*, 4(2–3):5–12, 1995.
- [5] Horia F. Pop. 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):7–10, 1997.
- [6] Horia F. Pop. 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):1–14, 1998.
- [7] Militon Frențiu, D. Dumitrescu, Basil Pârv, Leon Tâmbulea, and Horia F. Pop. Algoritmi utili existenți în rețeaua universității (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):111–122, 1999.
- [8] Horia F. Pop. Rețeaua Internet, mijloc de comunicare și sursă de informare (internet, communication medium and information source). *Ingineria Iluminatului*, 1:29–34, 1999. Technical University of Cluj-Napoca, Tempus-Phare CME-03551-97 Program. ISSN 1454-5837.
- [9] Horia F. Pop and Florin Pop. LSD — Lighting Systems Design — un program pentru proiectarea sistemelor de iluminat (LSD — Lighting Systems Design — software for designing of lighting systems). *Ingineria Iluminatului*, 4:74–79, 2000. Technical University of Cluj-Napoca, Tempus-Phare CME-03551-97 Program. ISSN 1454-5837.
- [10] Militon Frențiu and Horia F. Pop. 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*, pages 99–106, 2001.
- [11] Florin Pop, Horia F. Pop, and Sandor Orban. Architectural lighting, chromaticity and environment. *Ingineria Iluminatului*, 12:13–18, 2003. Technical University of Cluj-Napoca, Tempus-Phare CME-03551-97 Program. ISSN 1454-5837.
- [12] Horia F. Pop and Liana G.T. Pop. Scientific education: the logic denominator. *Didactica Matematica (Formerly Proceedings of the National Seminar Didactica Matematicii)*, 25(2):75–84, 2007.
- [13] Florin Pop, Horia F. Pop, Dorin Beu, and Călin Ciugudean. Iluminat eficient energetic în locuințe. *Revista Română de Informatică și Automatică*, 18(3):101–112, 2008. ISSN 1220-1758.
- [14] Mihaela Pop, Horia F. Pop, and Florin Pop. Appraisal of indoor lighting systems quality. *Ingineria Iluminatului*, 22:37–48, 2008. Technical University of Cluj-Napoca, ISSN 1454-5837.

III.2 Papers in proceedings of national conferences

- [1] Horia F. Pop and S. Mușatescu. Program de identificare a obiectelor pe baza unei multimi de atrbute asociate (program of objects identification based on the set of associated attributes). In *Buletin de Informare Tehnică*, pages 127–129, Bușteni, August 1988.
- [2] Horia F. Pop. Implementarea unor metode de clasificare ierarhică cu multimi nuanțate (implementation of some methods of hierarchical clustering with fuzzy sets). In *Buletin de Informare Tehnică*, Sinaia, August 1989.
- [3] F. Pop and Horia F. Pop. 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 și confort ambiental*, pages 299–302, Timișoara, April 2–3 1992.
- [4] Mircea Geantă, Horia F. Pop, and Roger Gladwin. Echilibre în soluții apoase. Programe vizuale sub Delphi (Equilibria in water solutions. Visual programs in Delphi). In *Anniversary conference - 50 years of the Faculty of Industrial Chemistry and Environmental Engineering of Timișoara*, Politehnic University of Timișoara, October 29–30 1998.

- [5] Horia F. Pop and Costel Sârbu. Theoretical approach of Fuzzy Clustering for Chemistry. In *Anniversary conference - 50 years of the Faculty of Industrial Chemistry and Environmental Engineering of Timișoara*, Politechnic University of Timișoara, October 29–30 1998.
- [6] Costel Sârbu and Horia F. Pop. Applications of Fuzzy Clustering in Chemistry. In *Anniversary conference - 50 years of the Faculty of Industrial Chemistry and Environmental Engineering of Timișoara*, Politechnic University of Timișoara, October 29–30 1998.
- [7] Horia F. Pop and Militon Frențiu. Detecting mistakes in students measurement projects. In *Colocviul Academic Clujean de Informatică*, pages 105–110, Cluj-Napoca, June 1-2 2005.
- [8] Leon Tâmbulea and Horia F. Pop. A formal approach of web sites management. In *Zilele Academice Clujene*, pages 66–72, Cluj-Napoca, July 5 2006.
- [9] Adriana M. Coroiu, Radu D. Găceanu, and Horia F. Pop. Ordinal data analysis using agglomerative clustering algorithms. In Militon Frențiu, Horia F. Pop, and Simona Motogna, editors, *Knowledge Engineering Principles and Techniques 2015, Book of Abstracts*, pages 240–246, Cluj-Napoca, Romania, July 2 2015. Babeș-Bolyai University.

III.3 Presentations at national symposiums

- [1] D. Dumitrescu, Gh. Lazarovici, and Horia F. Pop. Fuzzy clustering în arheologie (fuzzy clustering in archaeology). In *Simpozionul de Informatică Aplicată în științele Socio-Umane*, Cluj-Napoca, September 1989.
- [2] Horia F. Pop and D. Dumitrescu. Clasificare în bazele de cunoștințe și formarea conceptelor (classification in knowledge basis and in formation of concepts). In *Al 13-lea Simpozion Național de Conducere și Informatică, CONDINF*, Cluj-Napoca, June 1989.
- [3] Horia F. Pop and D. Sosa. Program de calcul pentru stabilirea necesarului de căldură (computer program for establishing the necessary of heat). In *Simpozionul științific de Construcții Climaterice și Balneare*, Oradea, October 27–28 1989.
- [4] D. Dumitrescu, Gh. Lazarovici, and Horia F. Pop. Aplicații ale clasificării multidimensionale în arheologie (applications of the multidimensional clustering in archaeology). In *Al 3-lea Simpozion Național de Arheometrie*, Cluj-Napoca, June 14–15 1990.
- [5] Fl. Medelet and Horia F. Pop. Clasificarea nuanțată a descoperirilor monetare din epoca Latene în Banat (fuzzy clustering of monetary discoveries of latene epoch in Banat). In *Al 4-lea Simpozion Național de Arheometrie*, Cluj-Napoca, September 19–20 1991.
- [6] Adela Paki and Horia F. Pop. Baze de date pentru clasificarea și datarea inscripțiilor (databases for clustering and dating of inscriptions). In *Al 4-lea Simpozion Național de Arheometrie*, Cluj-Napoca, September 19–20 1991.
- [7] Horia F. Pop and D. Dumitrescu. Problema validității claselor (cluster validity problem). In *Zilele Academice Clujene - Simpozionul Informatica și Aplicațiile Sale*, Cluj-Napoca, October 14–19 1991.
- [8] D. Dumitrescu and Horia F. Pop. Algoritmi de clasificare adaptivă (adaptive clustering algorithms). In *Zilele Academice Clujene - Simpozionul Informatica și Aplicațiile Sale*, Cluj-Napoca, October 12–17 1992.
- [9] D. Dumitrescu and Horia F. Pop. Clasificare nuanțată calitativă în arheologie (qualitative fuzzy clustering in archaeology). In *Al 5-lea Simpozion Național de Arheometrie*, Cluj-Napoca, March 27–28 1992.
- [10] F. Pop, D. Beu, and Horia F. Pop. Reprezentarea computerizată a planurilor de instalații electrice. In *Zilele Academice Clujene - Simpozionul Progresele în științele Tehnice*, Cluj-Napoca, 12–17 Octombrie 1992.
- [11] D. Dumitrescu and Horia F. Pop. O nouă clasă de algoritmi de instruire folosind rețele neuronale (a new class of training algorithms using neural networks). In *Zilele Academice Clujene - Simpozionul Informatica și Aplicațiile Sale*, Cluj-Napoca, October 25–30 1993.

- [12] Horia F. Pop. Clasificatori nuanțați supervizați (supervised fuzzy classifiers). In *Zilele Academice Clujene - Simpozionul Informatica și Aplicațiile Sale*, Cluj-Napoca, October 17–29 1994.
- [13] Horia F. Pop and D. Dumitrescu. Algoritmi pentru descompunerea convexă a partițiilor nuanțate finite (algorithms for convex decomposition of finite fuzzy partitions). In *Zilele Academice Clujene - Simpozionul Informatica și Aplicațiile Sale*, Cluj-Napoca, October 17–29 1994.
- [14] Horia F. Pop. Algoritmul de regresie nuanțată (the fuzzy regression algorithm). In *Zilele Academice Clujene - Simpozionul Informatica și Aplicațiile Sale*, Cluj-Napoca, October 26–37 1995.

IV Books with accredited publishers

- [1] Costel Sârbu and Horia F. Pop. Fuzzy soft-computing methods and their applications in chemistry. In K. B. Lipkowitz, R. Larter, and T. R. Cundari, editors, *Reviews in Computational Chemistry*, volume 20, pages 249–332. VCH Publishers, New York, 2004. ISBN 0-471-44525-8.
- [2] Paul A. Blaga and Horia F. Pop. *LaTEX 2 ϵ* . Editura Tehnică, București, 1999. 364 pages. ISBN 973-31-1290-5.
- [3] Gabriela Czibula and Horia F. Pop. *Elemente Avansate de Programare în Lisp și Prolog. Aplicații în Inteligența Artificială* (*Advanced Elements of Programming in Lisp and Prolog. Applications in Artificial Intelligence*). Editura Albastră, Cluj-Napoca, 2 edition, 2012. 270 pages.
- [4] Militon Frențiu, ..., Horia F. Pop, 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.
- [5] Militon Frențiu and Horia F. Pop. *Fundamentals of Programming*. Cluj University Press, 2006. 220 pag. ISBN 973-610-453-2.
- [6] Militon Frențiu, Horia F. Pop, and Gabriela Șerban. *Programming Fundamentals*. Cluj University Press, 2006. 232 pag.
- [7] Ossi Horowitz, Costel Sârbu, and Horia F. Pop. *Clasificarea Rațională a Elementelor Chimice*. Editura Dacia, Cluj-Napoca, 2000. 258 pagini. ISBN 973-35-1006-8.
- [8] Zoltán Kása and Horia F. Pop. *Comunicare în Internet* (*Communication in Internet*). Editura Albastră, Cluj-Napoca, 1997. 130 pages. ISBN 973-9215-63-7.
- [9] Horia F. Pop. *Sisteme Inteligente în Probleme de Clasificare* (*Intelligent Systems in Classification Problems*). Editura Mediamira, Cluj-Napoca, 2004. 183 pages. ISBN 973-0-03718-3.
- [10] Horia F. Pop and Gabriela Șerban. *Programare în Inteligența Artificială – Limbajele Lisp și Prolog* (*Programming in Artificial Intelligence – Lisp and Prolog Languages*). Editura Albastră, Cluj-Napoca, 2003. 178 pages. 1-st Ed. (2003), 2-nd Ed. (2004). ISBN 973-650-104-3.
- [11] Gabriela Șerban and Horia F. Pop. *Elemente Avansate de Programare în Lisp și 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.
- [12] Gabriela Șerban and Horia F. Pop. *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.
- [13] Florin Pop, ..., Horia F. Pop, 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 și accesul la informație (Internet and the access to information), pp. 140–148. ISBN 973-9358-27-6.

V University material

V.1 Didactical notes for courses

- [1] Militon Frențiu, ..., Horia F. Pop, et al. *Bazele Informaticii, Culegere de Probleme (The Basis of Computer Science, Problem Book)*. Babeș-Bolyai University, Cluj-Napoca, 1992. 16 chapters, 187 pages. Personal contribution: chapter 11, 20 pages.
- [2] Zoltán Kása and Horia F. Pop. *Rețele de Calculatoare II (Computer Networks II)*. Centrul de Formare Continuă și Învățământ la Distanță, Universitatea Babeș-Bolyai, Cluj-Napoca, 1999. 130 pages.
- [3] F. Pop, Adela Gârbu, M. Moca, V. Costea, Daniela Catană, and Horia F. Pop. *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, Programme de calcul pentru instalații electrice (Software for Electrical Installations), 24 pages.
- [4] Horia F. Pop. *Inteligentă Artificială – Note de curs (Artificial Intelligence – Lecture notes)*. Centrul de Formare Continuă și Învățământ la Distanță, Universitatea Babeș-Bolyai, Cluj-Napoca, 1999. 1-st Ed. (180 pages).
- [5] Horia F. Pop. *Programare Funcțională și Logică (Functional and Logic Programming)*. Babeș-Bolyai University, Cluj-Napoca, 1998. 149 pages.
- [6] Horia F. Pop and Gabriela Șerban. *Inteligentă Artificială – Note de curs (Artificial Intelligence – Lecture notes)*. Centrul de Formare Continuă și Învățământ la Distanță, Universitatea Babeș-Bolyai, Cluj-Napoca, 2000–2003. 2-nd Ed. (2000, 210 pages), 3-rd Ed. (2001, 223 pages), 4-th Ed. (2002, 190 pages), 5-th. Ed. (2003, 190 pages).

V.2 Technical reports

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

VI Software products

- [1] Horia F. Pop. Software Package for Design and Analysis of Low Voltage Electrical Installations, 1990–1994.
- [2] Horia F. Pop. 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 cross-classification. Available under MS-DOS.

- [3] Horia F. Pop. HPTEX — MS-DOS Turbo-Vision like text editor with a user-friendly L^AT_EX interface, 1994–1995.
- [4] Horia F. Pop. LIGHT — Software package for interior and exterior lighting design, 1994–1995.
- [5] Horia F. Pop. HPTEXW — Windows text editor with a user-friendly L^AT_EX interface, 1995.
- [6] Horia F. Pop. 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 cross-classification. Available under Windows.
- [7] Horia F. Pop and Mircea Geantă. CHAN — Didactical demonstrative software package for applications of Analytical Chemistry, 1998.
- [8] Horia F. Pop. 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, Mac OS.
- [9] Horia F. Pop. 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, Mac OS.