CHRISTO DICHEV

Curriculum Vitae

Office Address:

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EMPLOYMENT

Last job:

2010-present Professor, Computer Science Dept., Winston Salem State University, NC.

Previous jobs:

- 1999 2001 Associate Professor, Department of Computer Science, North Carolina A&T State University.
- 1994 -1999 Associate Professor, Institute of Information Technology, Bulgarian Academy of Sciences.
- 1994-1998 Adjunct Associate Professor, Faculty of Mathematics and Informatics, Sofia University.
- 1991-1994 IBM Newman Scholar, Department of Computer Science, University College Dublin, Ireland.
- 1988-1991 Associate Professor, Institute of Information Technology, Bulgarian Academy of Sciences.
- 1988-1991 Adjunct Associate Professor, Faculty of Mathematics and Informatics, Sofia University.
- 1983-1988 Research Associate, Institute of Cybernetics & Robotics Bulgarian Academy of Sciences.
- 1981-1983 Lecturer, University of Shumen, Department of Mathematics and Computer Science.
- 1974-1976 Assistant Professor, University of Shumen, Department of Mathematics and Computer Science.

EDUCATION

1980 Ph.D. in Computer Science from Kiev University, Faculty of Cybernetics, Computer Science Department; Title of the thesis: *"Formulae evaluation on finite models in knowledge representation systems"*, Advisor: Alexander Letichevsky
1974 M.Sc. in Computer Science from University of Sofia.
1972 B.Sc. in Mathematics from University of Sofia.

Academic Awards and Honors

1991-1994 IBM Newman Scholar Research Award for Visiting Research Fellowship at University College Dublin, Ireland, Department of Computer Science

1988 Leverhulme Trust Research Award for Visiting research Fellowship at University of Sussex, UK, School of Cognitive and Computing Sciences (1 year)

1974 Graduated with "Excellence" Diploma (Summa Cum Laude) from Sofia University, Bulgaria.

- 1972-1974 Merit-based student scholarship from the Ministry of Education, Bulgaria.
- 1973 1968 Graduated with "Excellence" Diploma (Bulgarian Governmental Award for high achievements) from Plovdiv Electro-Technical High School, Bulgaria.

FELLOWSHIPS

1983 Advanced Course in Artificial Intelligence, Vigneu, France (2 weeks).

TEACHING EXPERIENCE

Undergraduate courses:

- Artificial Intelligence, Department of Computer Science, Winston Salem State University
- Commercial programming, Department of Computer Science, Winston Salem State University
- Computer Architecture, Department of Computer Science, Winston Salem State University
- Computer Languages, University of Shumen, Dept. of Mathematics and Computer Science.
- Data Structures, University of Shumen, Dept. of Mathematics and Computer Science.
- Design and Analysis of Algorithms, Department of Computer Science, North Carolina A&T State University, Winston Salem State University
- Fundamentals of Internet Systems, Department of Computer Science, Winston Salem State University
- Introduction to Programming, University of Shumen, Dept. of Mathematics and Computer Science.
- Introduction to Data Science, Department of Computer Science, Winston Salem State University.
- Numerical Analysis, University of Shumen, Dept. of Mathematics and Computer Science.
- Operating Systems, Department of Computer Science, Winston Salem State University
- Operations Research, University of Shumen, Dept. of Mathematics and Computer Science.
- Principles of Programming Languages, Department of Computer Science, North Carolina A&T State University, Winston Salem State University.
- The Computer and its Us, Department of Computer Science, Winston Salem State University

- Web-based database management Systems, Department of Computer Science, Winston Salem State University
- Web Programming, Department of Computer Science, Winston Salem State University

Graduate courses:

- Advanced Operating Systems, Department of Computer Science, WSSU, Department of Computer Science, North Carolina A&T State University
- Artificial Intelligence, Technical University of Sofia, Department of AI and Intelligent Systems
- Artificial Intelligence Methods, Department of Computer Science, WSSU
- Design & Analysis of Algorithms Methods, Department of Computer Science, WSSU University of Sofia,
- Electronic Commerce Technology, Department of Computer Science, WSSU.
- Formal Methods in Artificial Intelligence, University of Sofia, Faculty of Mathematics and Informatics
- Internet technology, Department of Computer Science, WSSU University of Sofia,
- Logic Programming, University of Sofia, Faculty of Mathematics and Informatics
- Principles of Artificial Intelligence, University of Sofia, Faculty of Mathematics and Informatics;

Theses Advised:

• at M.Sc. level: a number of M.Sc. projects including most recently:

Atanas Atanasov (1997) *A framework to structuring knowledge and reasoning* Trendafil Madarov (1998) *A semantic view on cooperative reasoning systems* Dimitar Piskjulev (1998) *A context based reasoning and multi-agent systems Teketia Friend (2007)* Topic Maps: Tools for the Classroom *Christopher Whitfield (2008)* An evaluation of topic map editors" *Latoya Armstrong (2013)* OER CS: A Portal to Open Educational Resources in Computer Science *Tiffany Walker (2013)* Improving the Resource Exploration in the CS OER Portal *Michael Okpala (2013)* Employing Semantic Technologies in Content Management Systems

• at Ph.D. level:

Vladimir Jotsov (1991) *Knowledge based systems and reasoning by analogy* Hristo Petkov (1993) *A knowledge based approach to building a trigonometry tutor*

FUNDED RESEARCH

- 2014-2017 NSF IUSE Collaborative Research: Data Computing for All: Developing an Introductory Data Science Course in Flipped Format (PI) (09/01/2014-08/31/2017, \$139,943) (in collaboration with Villanova University)
- 2011-2013 NSF DUE-1044224 (2011-2013) NSDL: Social Bookmarking for Digital Libraries: Improving Resource Sharing and Discoverability (CoPI).

- 2005-2006 NSF DUE-0333069 (2005-2006) CCLI-EMD: Topic Maps-based Courseware to Support Undergraduate Computer Science Courses (PI).
- 2004-2005 NSF project "NSDL: Towards Reusable and Shareable courseware: Topic Maps-Based Digital Libraries." (CoPI)
- 1997-2000 European INCO-COPERNICUS NETWORK PROJECT No134-014:"EMG-NETWORK" (Scientific Coordinator).
- 1996-1998 European INCO-COPERNICUS Project No 96-0138 -"TRACE (TRansferring Charade Technology in Central and Eastern Europe)" (Technical Director).
- 1996-1998 French-Bulgarian CNR PECO Project "Integrated reasoning architectures" (PI).
- 1991-1993 EU TEMPUS Joint European Project 1497-91 "Transfer of knowledge-based systems skills to Bulgaria" (CoPI).
- 1995-1998 Bulgarian NSF Project U-521/95 "Methods for dynamic structuring of logic programs" (CoPI).
- 1991-1992 Bulgarian Academy of Sciences Project "A program environment for Net-Clause language" (CoPI).
- 1990-1991 Bulgarian Academy of Sciences Project "Methods and tools for building AI systems" (PI).
- 1990-1991 Bulgarian Science Foundation Project "Knowledge representation methods for educational computing systems" (PI).
- 1988-1990 Bulgarian Academy of Sciences Project "An expert system for technical diagnostics" (CoPI).
- 1988-1989 Bulgarian Science Foundation Project "Diagnostic expert systems for digital electronics" (CoPI).

PROFESSIONAL SERVICES AND HONORS

- Chair of the PC of the International Conference on Artificial Intelligence Methodology, Systems Applications (AIMSA 2016), September 7-9, 2016 (http://www.aimsaconference.org/).
- Chair of the PC of the International Conference on Software, Services and Semantic Technologies (S3T 2010), Varna, Bulgaria, September 11-12, 2010.
- Invited Talk: Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences two years in row – July, 2014
 Invited Talk: Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences two years in row – July, 2013
- Invited Plenary Speaker at The 5th International Conference on Symbolic and Numeric Algorithms For Scientific Computing, SYNASC-2003, Oct. 2003.
- Invited Speaker at the Second International Seminar: Theory and Applications of AI: "II'89", Sozopol, May, 1989
- Member of the Program and Steering Committees of a number of international conferences in the area of Information Technology, including recent and forthcoming:
- STEERING COMMITTEE: Fifth Joint Conference on Knowledge-Based Software Engineering (JCKBSE'2002), Maribor, Slovenia, 2002, Moscow, Russia 2004, Tallinn,

Estonia 2006, Piraeus Greece 2008. Kaunas, Lithuania, 2010, Rhodes, Greece, 2012, Volgograd, Russia, 2014.

PROGRAM COMMITTEES (Last ten years):

- International Symposium on INnovations in Intelligent SysTems and Applications, 2-5 August 2016, Sinaia.
- The "7th Balkan Conference in Informatics -- BCI'2015" forthcoming on 2-4 September 2015 in Craiova, Romania.
- 2014 Member of the Steering Committee of the 11th Joint Conference on Knowledge-Based Software Engineering, September 17-20, Volgograd.
- International Conference on Mathematic, Informatics and Education MIE-2014, Sofia, September 23-25, 2014.
- International Conference on Mathematic, Informatics and Education MIE-2014, Sofia, September 23-25, 2014
- 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September, 2013, Romania 2013
- International Conference on Mathematic, Informatics and Education MIE-2013, Sofia, September 19-22, 2013
- 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September, 2013, Romania
- Intelligent Exploration of Semantic Data (IESD'13), Paris, France. May 2013.
- 15th International Conference on Artificial Intelligence: Methodology, Systems, Applications AIMSA, Varna, Bulgaria, 2012.
- Intelligent Exploration of Semantic Data (IESD'12), Galway City, Ireland. October 2012
- IEEE International Conference on Advanced Learning Technologies (ICALT'12), July, 2012, Rome, Italy.
- 10th Joint Conference on Knowledge-Based Software Engineering, August 23-26, 2012 Rhodes - Greece.
- 6th European Conference on Technology Enhanced Learning, September 20-23, Palermo, Italy, September 2011.
- 13th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September, 2011, Romania.
- International Symposium on Integrating Research, Education, and Problem Solving: IREPS, December 2011.
- 24th International FLAIRS Conference, Special Track Ontologies and Social Semantic Web for Intelligent Educational Systems, May 2011, Palm Beach, Florida.
- 14th International Conference on Artificial Intelligence: Methodology, Systems, Applications, September, 2010, Varna, Bulgaria,
- 9th Joint Conference on Knowledge-Based Software Engineering, August 2010, Lithuania.
- 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC 2010, September, 2010, Timisoara, Romania
- International Intelligent Semantic Web Applications and Services (ISWSA2010), Aman, Jordan, June 2010.

- 7th Workshop on Agents for Complex Systems, September 23-26, 2010, Timisoara, Romania.
- 10th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC 2009, September, 2009, Timisoara, Romania.
- International Conference on Software, Services & Semantic Technologies, S3T'09, Sofia October, 2009
- 8th IASTED International Conference on Web Based Education (WBE 2009), March, 2009, Thailand.
- 7th International Conference on Computing, Communications and Control Technologies: CCCT 2009, July, Orlando, Fl.
- 6th Workshop on Agents for Complex Systems, September 26-29, 2009, Romania.
- 8th IEEE International Conference on Advanced Learning Technologies, July 2008, Cantabria, Spain
- 10th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September, 2008, Romania.
- 13th International Conference on Artificial Intelligence: Methodology, Systems, Applications (AIMSA 2008), Varna, Bulgaria, September, 2008
- Joint Conference on Knowledge-Based Software Engineering (JCKBSE 2008), Pireaus, Greece, August 25–28, 2008.
- 5th Workshop on Agents for Complex Systems, September 26-29, 2008, Timisoara, Romania.
- Sixth International and Interdisciplinary Conference on Modeling and Using Context, Denmark, August 20-24, 2007.
- 9th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, October, 2007, Romania.
- 45th ACM Southwest Conference, Winston-Salem, NC, March 18-19, 2007.
- The 2006 International Conference on Artificial Intelligence (IC-Al'06: June, 2006, Las Vegas, US
- 8th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, October, 2006, Romania.
- The Twelve International Conference on Artificial Intelligence: Methodology, Systems, Applications, Varna,1-3rd September, 2006.
- 7th Joint Conference on Knowledge-Based Software Engineering (JCKBSE 2006), Tallinn, Estonia, August, 2006.
- 7th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, October, 2005, Romania.
- The Fifth International and Interdisciplinary Conference on Modeling and Using Context (CONTEXT-05), July, 2005, France.
- The Twelve International Conference on Artificial Intelligence: Methodology, Systems, Applications AIMSA'04, Varna, September, 2004.
- 6th Joint Conference on Knowledge-Based Software Engineering (JCKBSE 2004), Protvino, Russia August, 2004.

- 6th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, October, 2004, Romania.
- Fourth International and Interdisciplinary Conference on Modeling and Using Context, Stanford, California (USA), June 23-25, 2003.
- The 2003 International Conference on Artificial Intelligence (IC-AI'02: June 2003, Las Vegas, USA)
- The 5th International Conference on Symbolic and Numeric Algorithms For Scientific Computing SYNASC-2003, October, 2003, Romania.
- The Tenth International Conference on Artificial Intelligence: Methodology, Systems, Applications, Varna, 4-6th September, 2002.
- The 4th International Conference on Symbolic and Numeric Algorithms For Scientific Computing SYNASC-2002.
- Third International and Interdisciplinary Conference on Modeling and Using Context, Dundee, Scotland, July 27-31, 2001.
- The 3rd International Conference on Symbolic and Numeric Algorithms For Scientific Computing, SYNASC-2001, Romania, 2001.
- The Ninth Symposium on Artificial Intelligence and Neural Networks, TAINN 2000, Izmir, Turkey, June 2000.
- Fourth Joint Conference on Knowledge-Based Software Engineering (JCKBSE'2000), Brno, Czech Republic, September 2000.
- Tenth International Conference on Computing and Information (ICCI'2000), Kuwait, November 2000.
- Ninth International Conference Artificial Intelligence: Methodology, Systems, Applications (AIMSA'2000), Sozopol, Bulgaria, September 2000.
- UNESCO consultant in AI in Educational Computing, United Nations Development Program Syria, 1991.
- Reviewer of research grant proposals for the Bulgarian National Science Foundation and the Bulgarian Academy of Sciences.
- Reviewer of paper submissions for a number of reputable international conferences, including the European Conference of Artificial Intelligence (ECAI).
- Reviewer of Ph.D. dissertations on Artificial Intelligence and others.
- Book reviewer "Machine learning methods".
- Stipend for excellence in performance, Sofia University, 1973.

Journals (editorial/reviewer)

- Journal of Cybernetics And Information Technologies (CIT) (Editorial Board)
- International Journal on Artificial Intelligence and Application for Smart Devices (IJAIASD) (Editorial Board)
- The Electronic Journal of e-Learning (EJEL) (Reviewer)

PROFESSIONAL MEMBERSHIPS

- Member of the Association for the Advancement of Artificial Intelligence (AAAI).
- Member of the European Coordinating Committee for Artificial Intelligence (ECCAI).
- Chairman of the Bulgarian Artificial Intelligence Association (BAIA) 1996-2000.
- Organizing Chairman of the biannual International Conference "Artificial Intelligence: Methodology, Systems, Applications" AIMSA (1984 1998).
- Member of the Scientific Counsel of the Institute of Information Technology, Bulgarian Academy of Sciences (1994-1999).
- Chair of the Bulgarian Artificial Intelligence Association Research Seminar (1996-1998).
- Chair of the Research Seminar of the Institute of Information Technology, Bulgarian Academy of Sciences (1994-1998).

PUBLICATIONS

JOURNAL ARTICLES AND BOOK CHAPTERS

- Dicheva D., Dichev C., Agre G. and Angelova G. (2015) Gamification in Education: A Systematic Mapping Study to appear in Journal of Educational Technology and Society Volume 18 Number 1.
- Dichev, C., Dicheva, D., Agre, G., & Angelova, G. (2015). Trends and Opportunities in Computer Science OER Development. *Journal of Cybernetics And Information Technologies*, 15(3), 114-126.
- Dichev, C., Dicheva, D., Angelova, G., Agre, G. (2014) From Gamification to Gameful Design and Gameful Experience in Learning, Journal of Cybernetics And Information Technologies, Volume 14, No 4.
- Dichev, C., Dicheva, D., Agre, G., Angelova, G. (2013) Current Practices, Trends and Challenges in K-12 Online Learning, Journal of Cybernetics And Information Technologies, Volume 13, No 3, 91-110.
- Johnsen L., Dicheva D., Dichev C. (2011) Visualizing and Presenting Story Maps in TM4Book. In: *Software, Services and Semantic Technologies,* Springer, AICS 101, 53-58.

Dichev, C., Xu, J., Dicheva, D., Zhang, J. (2009) Measuring Similarity of Interests for Clustering Taggers and Resources, *<u>International Journal of Virtual Communities and Social</u> <i>Networking* (IJVCSN), 1(3), 2009, 1-20.

- Dicheva, D., Dichev, C. (2009) Authoring and Exploring Learning Content: Share Content by Sharing Concepts, In Dicheva, D., Mizoguchi, R. Greer, J. (Eds.) *Semantic Web Technologies for e-Learning, IOS Press*, The Netherlands, 24-43.
- Dicheva D., Dichev C. Ontological Support for Learning Content Management, *Scientia Journal, Special Issue of Semantic Web for Educational Systems, 19(2), 2008.*
- Dicheva D., Dichev C. Authors Support in the TM4L Environment, Intl. Journal "Information Technologies and Knowledge" Vol. 1/ 2007, 215-219.
- Dicheva, D., Dichev, C. TM4L: Creating and browsing educational topic maps *British Journal of Educational Technology, Vol 37 No 3 2006, pp.*391–404

- Dicheva, D., Dichev, C. A Framework for Concept-Based Digital Course Libraries, Journal of Interactive Learning Research - JIRL, Special issue on Computational Intelligence In Web-Based Education, A.V. Vasilakos, V. Devedzic, Kinshuk (Eds) Vol. 3, No. 3, 2004.
- Dichev, C., Dicheva, D., Aroyo, L. (2004). Using Topic Maps for Web-based Education. *Advanced Technology for Learning*, 1(1), 2004, pp. 1-10.
- Dichev C., Exploiting Informal Communities in Information Retrieval. *Knowledge-Based Software Engineering*, IOS Press, pp 195-204.
- Dichev C., Do What We Do to Find What You Want. *Artificial Intelligence: Methodology, Systems, Applications, Springer-Verlag, 2002, pp. 253-263.*
- Dichev C., A Framework for Context-Driven Web Resource Discovery, *Lecture Notes in Artificial Intelligence 2116*, Springer-Verlag, 2001, pp. 433 438.
- Dichev C., Madarov, T. Propositional Contexts. *Artificial Intelligence: Methodology, Systems, Applications*, Springer-Verlag, 2000, pp. 101-110.
- Paggio R., Agre G., Dichev C., Umann G., Rozman T., Batachia L., Stocchero M. A costeffective programmable environment for developing environmental decision support systems, *Environmental Modelling & Software Journal*, 14 (5), 1999, pp. 367-382.
- Dichev C. Multi-context systems and knowledge integration. In: Ueno H., Navrat P. (Eds.) *Knowledge Based Software Engineering*, Smolenice, Slovakia, IOS Press, 1998, pp. 200-207.
- C. Dichev, Contexts as communicating theories. *AI Communications The European Journal* on *Artificial Intelligence*, 10(3), 1997, pp. 185-201.
- Dichev C. Generating contexts in a multi-context setting. In: Ramsay, A. (Ed.), *Artificial Intelligence: Methodology, Systems, Applications,* IOS Press, 1996, pp. 51-60.
- C. Dichev, Knowledge bases as compound theories. *Irish Journal of Psychology*, 14(3), 1994, pp. 499-501.
- Dichev C. Logic programming with worlds. In: Du Boulay, B., Sgurev, V. (Eds). *Artificial Intelligence: Methodology, Systems, Applications,* North-Holland, 1992, pp. 57-66.
- Markov Z., D. Dochev, C. Dichev, G. Agre Geometric modeling with Prolog (in Bulgarian). *Automation, Computers and Computer Systems,* 4, 1987, pp. 17-24.
- Agre G., C. Dichev, D. Dochev, Z. Markov Implementation and use of PROLOG for personal computers (in Russian). *Engineering Cybernetics*, 1, Moscow, 1986, pp. 94-99.
- Sgurev, V., D. Dochev, C. Dichev, G. Agre, Z. Markov An approach to building technical diagnostic expert systems. *Computers and Artificial Intelligence*, Bratislava, 5, 1985, pp.103-116.
- Dichev C. Computer applications for solving problems based on a logical computation. Annual of VPI, volume I (B),1985, pp. 17-28.
- Sgurev, V., D. Dochev, Z. Markov, C. Dichev, G. Agre, Problems in building knowledge acquisition facilities for expert systems. *Problems of Engineering Cybernetics and Robotics, Sofia, BAS, No 27*, 1985, pp. 20-30.
- Dichev C. Data representation for calculating truth values of logical formulae on finite models (in Russian): *Theoretical Issues of Designing Computer Systems*, 1, Academy of Sciences of USSR, Kiev, 1980, pp. 88-96.

REVIEWED CONFERENCE ARTICLES

- Nikolova, I., Dicheva, D., Agre, G., Angelov, Z., Angelova, G., Dichev, C., and Madzharov, D. (2016) Emerging Applications of Educational Data Mining in Bulgaria: The Case of UCHA.SE, Springer Studies in Computational Intelligence (in print)
- Dicheva, D. & Dichev, C. (2015). CS/IT OER: Availability, Discoverability and Use. In SIGITE '15 Proceedings of the 16th Annual Conference on Information Technology Education, 133-138.
- Cassel, L.N., Dicheva, D., Dichev, C., Goelman, D., and Posner, M. (2016) Data Science for All: An Introductory Course for Non-Majors. In 2016 SIGCSE '16: Proceedings of the 47th ACM Technical Symposium on Computing Science Education, 691-691.
- Dicheva, D. & Dichev, C. (2015). Gamification in Education: Where Are We in 2015?. In Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2015 (pp. 1276-1284). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
- Dicheva D., Dichev C. 2014. Finding Open Educational Resources in Computing. 14th ICALT Conf., Athens, Greece.
- Dicheva, D., Irwin, K. Dichev, C., Talasila, S. (2014) A Course Gamification Platform Supporting Student Motivation and Engagement, *IEEE ICWOAL'14*, Dubai, UAE, 25-27 November 2014, pp. 1-4.
- Dichev C., Dicheva D. (2013) Support for Independent Learning in Evolving Computer Science Disciplines, Proc. IEEE WICT 2013, Vietnam, 2013.
- Dicheva D. Dichev C., (2013) Leveraging Domain Specificity to Improve Findability, T. Aaalberg et al. (eds.), TPDL 2013, LNCS 8089, Springer-Verlag, 2013
- Dichev C., Dicheva D (2012) A Domain Specific Open Educational Repository, In: Proceedings of the Third Annual International Conference on Computer Science Education: Innovation and Technology, CSEIT, 2012, December, Singapore.
- Dichev C., Dicheva D (2012) Is It Time to Change the OER Repositories Role?, In: Proceedings of the ACM/IEEE Joint Conference on Digital Libraries - JCDL, 2012, Washington, DC, 31-34.
- Dichev C., Dicheva D (2012) Open Educational Resources in Computer Science Teaching, In: *Proceedings of the ACM SIGSE 2012*, 03/01-03/03, 2012, Raleigh, NC (acceptance rate for full papers 34.6%).
- Dichev C., Dicheva D (2012) Is It Time to Change the OER Repositories Role?, In: *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries JCDL 2012*, June 10-14, 2012, Washington, DC (accepted) (acceptance rate for full papers 28.5%).
- Dichev C., Dicheva D (2012) Open Educational Resources in Computer Science Teaching, In: *Proceedings of the ACM SIGSE 2012*, 03/01-03/03, 2012, Raleigh, NC (acceptance rate for full papers 34.6%).
- Dicheva D., Dichev C. (2011) Can Collective Use Help for Searching?, In: Proceedings of the IEEE 2011 International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery, 10/10-10/12, 2011, Beijing, China, 2011, 24-31 (acceptance rate for regular papers 24%).

- Dicheva D., Dichev C., Damova M. (2011) Ontological Support for Creative Writing. *The 24th International FLAIRS Conference*, Palm Beach, FL, May 18-20, 2011, 576-578.
- Dicheva D., Dichev C, Drayton R. (2010) Search and Exploration in LinkedCourse. *The 23rd International FLAIRS Conference*, Daytona Beach, FL, May 18-22, 2010.
- Dicheva D., Dichev C. (2010) Finding Resources and Collaborators within Digital Collections, In Proceedings of the *IEEE/ACM International Conference on Web Intelligence*, 08/31-09/03, 2010, Toronto, Canada, 2010 (acceptance rate for regular papers 16.6%)
- Zhu, Y., Dicheva, D., Dichev, C., Moran, M. (2009). Connecting and Sharing Open-Content Learning Resources, <u>International Conference on Software, Services and Semantic</u> <u>Technologies</u> – S3T'09, Sofia, Bulgaria, October 28-29, 2009 (accepted).
- Irwin, K., Dicheva, D., Dichev, C. (2009). A Digital Repository Supporting Collaboration, <u>International Conference on Software, Services and Semantic Technologies</u> – S3T'09, Sofia, Bulgaria, October 28-29, 2009 (accepted).
- Dicheva, D., Dichev, C., Zhu, Yi (2009). Sharing Open-Content Learning Resources in Emerging Disciplines. Seventh Int'I <u>Workshop on Ontologies and Social Semantic Web for</u> <u>E-Learning</u>, in conjunction with <u>Int. Conf. on AI in Education</u> – AIED'09, Brighton, UK, July 6-10, 2009, 23-30.
- Xu J., Dichev C., Esterline A., Dicheva D., Zhang J. On the effectiveness of collaborative tagging systems for describing resources, Proc. World Congress on Computer Science and Information Engineering, (CSIE), USA, April, 2009.
- Dichev C., Dicheva D., Ditcheva B., Moran M., Translation between RDF and Topic Maps: Divide and Translate, Balisage: The Markup Conference, August 12-15, Montreal, 2008 (accepted)
- Dicheva D., Dichev C., Brown C., Veetil D., Thomas W. Easy Creation Of Semantics-Enhanced Digital Artwork Collections, Int. Conf. on Intelligent Information and Engineering Systems, July, 1-4, 2008, Varna, Bulgaria 92-98.
- Dichev C., Dicheva D., Fisher, J. (2007). Identity: How to Name It, How to Find It, *Workshop* on <u>13: Identity, Identifiers, Identification</u>, <u>16th Int. Conference on World Wide Web</u>, WWW 2007, May 8-12, 2007, Banff, Alberta, Canada (accepted).
- Dicheva D., Dichev C., (2007). Helping Courseware Authors to Build Ontologies: the Case of TM4L, <u>13th Int. Conference on Artificial Intelligence in Education</u>, AI-ED 2007, July 9-13, 2007, LA, California (accepted).
- Wang, D., Dicheva, D., Dichev, C., Akouala, J. (2007) Retrieving Information in Topic Maps: the Case of TM4L, <u>45th ACM Southeast Conference</u>, Winston-Salem, NC, March 23-24, 2007.
- Dichev C., Dicheva D. (2006). View-Based Semantic Search and Browsing, , 2006 IEEE/ACM International Conf. on Web Intelligence (WI'06), December 18-22, 2006, Hong-Kong.
- Dichev C., Dicheva D. (2006). <u>Context-based Search in Topic-centered Digital Repositories</u>, 3rd International Semantic Web User Interaction Workshop (SWUI06), collocated with ISWC'06, GA.
- Dichev C., Dicheva D., Fisher, J. (2006). Contextual Retrieval of Digital Content in Topic Maps, Workshop on Modeling and Retrieval of Context, 13th National Conference on Artificial Intelligence, AAAI 2006, July 16-18, 2006, Boston, MA, 16-22.

- Dichev,C., Dicheva, D Contexts as abstraction of grouping in *Proceedings of* The AAAI'05 International Workshop on Contexts and Ontologies: Theory, Practice and Applications, Pittsburgh, 2005, pp. 49-56
- Darina D., Dichev C., Visualising Topic Maps for e-Learning in *Proceedings of* SW-EL'05 @ ICALT'05 *20004,* Eindhoven, Taiwan, 2005.
- Darina D., Dichev C., Educational Topic Maps, Third International Semantic Web Conference (ISWC2004), November, 2004, Hiroshima, Japan.
- Darina D., Dichev C., Sun Y., Nao S. Authoring Topic Maps-based Digital Course Libraries, in *Proceedings of* SWEL AH'04 *20004*, Eindhoven, The Netherlands, August , 2004.
- Dichev, C., Dicheva, D. (2003). Reusable and Shareable Digital Course Libraries. Fifth International Workshop on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC03), October 1 - 4, 2003, Timisoara, Romania, pp. 27-38 (invited paper).
- Dicheva, D., Dichev, C. (2003). Building and Using Open Web-Based Course Libraries. Twelfth International Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN 2003), Canakkale, Turkey, July 02 - 04, 2003, 349-357.
- Dicheva D., Dichev C. Using Topic Maps for E-Learning. Proc. of CATE 2003, Rhodes, Greece, 2003.
- Dichev C.. (2002). Tracking the 'interesting'. Proc. of , *TAINNt'02*, June 20-22, 2002, Istanbul, Turkey, pp. 161-170.
- Dichev C., Dicheva D. (2002). Interesting as a category in information retrieval. Proc. of *The 2002 International Conference on Artificial Intelligence* (IC-Al'02) June 24-27, 2002 *(IC'2001),* Las Vegas, Nevada, 2002, pp. 833-839.
- Dichev Ch, Dicheva D., Deriving Context Specific Information on the Web, *Proc. of The WebNet 2001*, Orlando, 2001, pp. 296-301.
- Dichev Ch, Dicheva D., Radenski A. A Framework for Dynamic Topic Clustering on the Web In: Proc. of *The 2001 International Conference on Internet Computing (IC'2001)*, Las Vegas, Nevada, 2001, pp. 885- 993.
- Dichev C. Reasoning Systems: Importing Contexts In: *Proc. of* TAINN 2000, June 2000, Izmir, Turkey.
- Dichev C. Contextual reasoning and importing contexts. In: *Proc. of the AAAI-99 Workshop on Reasoning in Context for AI Applications*, Orlando, 1999.
- Agre G., Dichev C., Markov Z. Task Editor a knowledge acquisition tool for task analysis. In: Ueno H., Navrat P. (Eds.) *Proceedings of the Third Joint Conference on Knowledge Based Software Engineering*, Smolenice, Slovakia, IOS Press, 1998, pp. 191-195.
- Paggio R., Agre G., Dichev C., Umann G., Rozman T., Dochev D. TRACE a development platform for environmental decision support systems. In: *Proceedings of ECAI WS Binding Environmental Sciences and Artificial Intelligence*, Brighton, 1997, pp.145-160.
- Dichev C. A framework of contextual reasoning. In: *Proceedings of the Fifth Turkish Symposium on Artificial Intelligence and Neural Networks*, Istanbul, Turkey, 1995, pp. 207-218.
- Dichev C. Knowledge representation with W-Prolog, In: *Proceedings of Eleventh Conference* on Applications of Artificial Intelligence, AAI-XI, Orlando, FL, 1993, pp. 316-327.

- Dichev C. Distributed knowledge and data processing. In: *Proceedings of Forth International Conference on Cognitive and Computer Science*, Montreal, Canada, 1993, pp. 272-282.
- Dichev C. Theory relations and context dependencies. In: *Proceedings of the Sixth Conference on Artificial Intelligence,* Melbourne, Australia, World Scientific Publishing, 1993, pp. 266-272.
- Markov, Z., Dichev, C. Distributed logic programming. In: *Proc. of 3rd UK Conference on Logic Programming*, Edinburgh, Springer-Verlag, 1991, pp. 36-56.
- Markov, Z., Sinapova, L. Dichev, C. Default reasoning in a network environment. *Proceedings of ECAI-90, August 6-10, 1990*, Stockholm, Sweden.
- Markov, Z., Dichev, C., Sinapova, L. The Net-Clause Language a tool for describing network models. In the *Proceedings of the Eighth Canadian Conference on AI, Otawa*, 23-25 May, 1990, pp.33-39.
- Dichev, C., Agre G., Dochev D., Markov Z. Trigonometry tutor. *Proceedings of Forth International PEG Conference: Learning with Artificial Intelligence*, Upsala, Sweden, 1989.
- Sgurev, V., C. Dichev, Z. Markov, An Overview of Prolog Debugging Tools. Proceedings of the Second International Seminar: Theory and Applications of Al: "II'89", Sozopol, May 29 - June 2, Sofia, BAS, 1989, pp. 54-62.
- Dichev C., D. Dochev, Z. Markov, G. Agre, An approach for building and using a trigonometric knowledge base (in Bulgarian). *Proceedings of the Second Conference PERSCOMP'87, April 21-24, 1987,* Sofia, volume 2, pp. 200 -204.
- Sgurev, V., D. Dochev, Z. Markov, C. Dichev, G. Agre, Some aspects of building intelligent CAD systems (in Bulgarian). *Proceedings of the Second Conference PERSCOMP'87, April 21-24, 1987*, Sofia, volume 2, pp. 181-185.
- Sgurev V., G. Agre, Z. Markov, C. Dichev, D. Dochev, Applyying Prolog for robot planning. *Proceedings of the Third International Conference ROBCON'3,* Sofia, BAS, 1986, pp. 177-187.
- Markov Z., D. Dochev, Ch Dichev, G. Agre, Prolog and computer graphics (in Bulgarian). *Proceedings of the First Conference PERSCOMP'85*, Sofia, 1985, pp. 139-147.
- Sgurev V., C. Dichev, D. Dochev, Z. Markov, G. Agre, An expert system for personal computer diagnostic. *Proceedings of the First Conference PRSCOMP'85, volume II*, Sofia, 1985, pp. 262-271.
- Sgurev V., D. Dochev, C. Dichev, Applying artificial intelligence methods for automation of engineering processes. *Emerging Scientific Problems*, *CSI*, *BAS*, Sofia, 1985, 47 p.
- Dichev C., On an knowledge representation formalism, *Mathematics and Mathematical Education*, Sofia, BAS, 1982, pp. 363-368.
- Dichev C., Question answering system "FOLCOM". *Proceedings of the Conference "10 Years University of Shumen*", October, 20-22, 1981, Shumen, 1982, pp. 222-229.
- Dichev C., An approach for building a question-answering system (in Russian), Mathematical Methods for Computer System Development, Institute of Cybernetics, Academy of Sciences of USSR, Kiev, 1980, pp. 64-68.

- Dichev C., Calculating efficiently logical formula values in knowledge representation systems (in Russian). *Proceedings of the Forth Conference of Bulgarian Postgraduate Students (July, 1979),* Sofia University, 1980, pp. 837-842.
- Dichev C., An algorithm for identifying true closed logical formulae on finite models (in Russian), *Theoretical Issues of Designing Computer Systems, Institute of Cybernetics, Academy of Sciences of USSR*, Kiev, 1979, pp. 33-41.
- Hristov H, Dichev C., An algorithm for calculating double roots of transcendental equations. *Proceedings of the National Conference on FORTRAN*, Sofia, 1975, pp. 106-110.

BOOKS

- Dichev, C., Stefanov, K., Stefanova, E. (Eds), Software, Services, and Semantic Technologies. Proceedings of the 2nd International Conference S3T, ISBN 978-954-9526-71-4, Demetra, 2010.
- Dochev D., C. Dichev, Z. Markov, G. Agre, Programming in Prolog Bases and Applications. Sofia, "*Nauka I Izkustvo*", 1989, 248 p. (in Bulgarian).

University Services:

- WSSU Faculty Senate Representative (2004-2007, 2013-2015)
- Member of the Graduate Council (2010-2012)

EXPERIMENTAL SOFTWARE DEVELOPED

- CS OER Portal
- TM4L Topic Maps Editor for E-Learning
- CSY Prolog an original logic programming language for personal computers
- Technical diagnostic expert systems (DIGS)
- TRACE a development platform for environmental decision support systems
- Trigonometry Tutor an intelligent tutoring system for teaching high-school trigonometry
- UCD Prolog an object-oriented extension to Prolog for distributed knowledge and data processing
- Prolog Tracer a data tracing system for Prolog novices