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Curriculum Vitæ

Enrico Pontelli

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Areas of Interest

- Knowledge Representation and Reasoning: reasoning about actions and change; reasoning with preferences; planning; multi-agent systems.
- Bioinformatics: protein structure determination; analysis of densty maps; evolutionary informatics.
- Parallel and Distributed Processing: High Performance Logic and Constraint Programming Systems; Automatic Parallelization and Parallelizing Compilers; Dynamic Scheduling; Applications.
- Computer Science and STEM Education: K-12 interventions; Computational Thinking in the curricula; broadening participation in computing.
- Assistive Technologies: Universal Accessibility of the World Wide Web; Software Technologies for the Visually Impaired; Universal accessibility of Mathematical content.
- Programming Languages: Declarative Programming Languages; Logic Programming; Sequential and Parallel Implementation Technology; Domain Specific Languages; Constraint Programming and Constraint Solving; Compile Time Analysis.
- Computational Aspects of Programming Languages Implementation: Computational Complexity Results; Dynamic Data Structures.
- Computable Set Theory: Constraint Solving over Sets, Multisets, and Aggregates; Unification and Disunification in Set Theory; Programming with Sets.

Education

Ph.D. Computer Science, August 1997, New Mexico State University. Advisor: Dr. Gopal Gupta. **Thesis:** Efficient Parallel Execution of Prolog Programs.

M.S. Computer Science, July 1992, University of Houston. Advisor: Dr. Louis Slothouber. Thesis: Logic Programming with Sets: theory and implementation.

Laurea Computer Science, March 1991, University of Udine, Italy. Advisors: Dr. Gianfranco Rossi and Dr. Eugenio Omodeo. Thesis: Logic Programming with Sets (in Italian).

Professional Experience

2/16	Dans Callana of Auto la Caissana
3/16 - present:	Dean, College of Arts & Sciences,
	New Mexico State University.
1/15 - present:	Regents Professor, Dept. Computer Science,
	New Mexico State University.
7/14 - 3/16:	Associate Dean, College of Arts & Sciences,
	New Mexico State University.
1/09 - 6/14:	Department Head, Dept. Computer Science,
	New Mexico State University.
8/05 - 1/14:	Full Professor, Dept. Computer Science,
	New Mexico State University.
8/02 - 7/05:	Associate Professor, Dept. Computer Science,
	New Mexico State University.
8/97 - 7/02:	Assistant Professor, Dept. Computer Science,
	New Mexico State University.
1/96 - 8/96:	Software Specialist, Project ERAD,
	Dept. of Computer Science, NMSU.
1/96 - 5/96:	Lecturer, Department of Computer Science,
	University of Texas at El Paso.
8/92 - 8/97:	Research Assistant, Department of Computer Science, NMSU.
1/92 - 7/92:	Research Assistant, Department of Computer Science,
	University of Houston.
8/90 - 3/91:	Consultant, ENIData and University of Bologna,
· · · · · · · · · · · · · · · · · · ·	Esprit Project AXL, Bologna (Italy).
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Administrative Experience

Administrative Appointments

- $\bullet\,$ Dean, College of Arts and Sciences, NMSU, 3/16-present.
- \bullet Associate Dean for Resources and Strategic Planning, College of Arts and Sciences, NMSU, 7/14-3/16.

- Department Head, Computer Science, NMSU, 1/09-6/14.
- Director of Graduate Studies, Computer Science, NMSU, 2000-2008.
- Founding Director, Interdisciplinary Center for Research Excellence in Design of Intelligent Technologies for Smartgrids (iCREDITS), 2014-present.
- Director, Center of Research in Computational Biology and Bioinformatics, NMSU, 2008-2012.
- New Mexico Computer Science Teachers Association, Vice-Chair: 2015-2019; Treasurer: 2020-present.
- Vice-Chair, ACM Special Interest Group on Computers and Accessibility, 2009-2012.
- Director, Knowledge representation, Logic, and Advanced Programming laboratory, 2001-present.
- Leadership Committee Member, Computing Alliance of Hispanic Serving Institutions (CAHSI), 2009-present.
- Lead, Southwest Region, CAHSI INCLUDES Alliance, 2019-present.

Summary of Recent Administrative Accomplishments

- Devasthali Hall: Successfully promoted GO-Bond (e.g., working with community groups and other stakeholders), facilitated activities leading to the launch and completion of the construction project.
- Curricula: led interdisciplinary teams that led to two proposals for new degree programs (Graduate Degree in Data Analytics, Undergraduate degree in cybersecurity); guided effort to revise requirements for the Bachelor of Applied Studies.
- Retention: Designed the Aggie JumpStart program; fundraised to secure funding for initial pilots.
- Development: surpassed annual college fundraising expectations for the last three years; launched fundraising for the Sustaining Academic Progress initiative.
- Research: developed and launched the Discovery Scholars Program, an interdisciplinary College-wide research experience for undergraduates program.

Awards and Honors

- NSF CISE Advisory Committee, 2021.
- Benjamin Dasher Best Paper Award, "Exploring the Relationships between Computational Thinking and English Literature in K-12 Curricula," (with Natasha Nesiba and Timothy Staley), IEEE Frontiers in Education, 2015.

- Regents Professorship, 2014.
- Distinguished Achievement Professorship, 2012.
- Best Student Paper Award, "Constraint Programming in Community-based Gene Regulatory Network Inference," (with F. Fioretto), 11th International Conference on Computational Methods in Systems Biology, 2013.
- New Mexico State University Research Accomplishment Award, 2012.
- New Mexico State University, College of Arts & Sciences, Exemplary Department Head Award, 2012.
- New Mexico State University, 2012 S.P. and Margaret Manasse Scholar.
- Best Student Paper Award, "On Computing Conformant Plans Using Classical Planners", (with K. Nguyen, V. Tran and T. Son), International Conference on Automated Planning and Scheduling, 2012.
- NMSU, College of Arts & Sciences, Outstanding Accomplishments in the area of Outreach, 2011.
- Senior Member, Association for Computing Machinery, 2011.
- Best Paper Award, International Conference on Logic Programming, Edinburgh, Scotland, 2010.
- DAMP Conference Series Steering Committee member, 2010-2012.
- Winner (with V. Tran, K. Nguyen and T. Son) of the NOND Track of the 2008 International Planning Competition.
- ACM Service Award, 2005 and 2007.
- ASSETS Conference Series Steering Committee member, 2007-2012.
- Elected Member of the Executive Committee, Italian Association for Logic Programming (GULP), 2006–2014.
- 2006 Arts & Sciences Faculty Outstanding Achievement Award.
- 2006 NMSU Presidential Travel Allocation Award.
- 2005 NMSU University Research Council Award for Creative Scholarly Activities.
- Elected Member of the Executive Committee of the International Association of Logic Programming, 2005-2009.
- 2003, Best Paper Award, ACM Conference on Universal Usability, Vancouver, 2003.
- 2001 Donald Roush Award for Excellence in Teaching, NMSU.
- 1994, 1995, 1996 New Mexico State University Student Research Project Award.

- 1993-94 and 1994-95 Phillips Petroleum Fellowship in Parallel Computing.
- 1994 Phillips Petroleum Graduate Research Award.
- E.E.C. Fellowship to complete a Master Program at University of Houston, University of Udine, August 1991 July 1992.
- 'Diritto di Stampa' (assigned to recognize outstanding thesis works), University of Udine, March 1991.
- Special Mention (outstanding academic performance—assigned to the top graduating student), University of Udine, March 1991.
- "E. Rossi" fellowship for distinguished students (top student in the University in 1990) University of Udine, December 1990.

Research Grants

Current Grants

- PI, "DEPICT Engaging a Diverse Student Population in Computational Thinking through Creative Writing and Performances," National Science Foundation, \$299,733, 01/22-12/23.
- Co-PI, "BPC-AE: An Extended CAHSI Alliance to Broaden Participation in Graduate Studies," National Science Foundation, \$2,891,942, 10/21-09/26.
- PI, "iCREDITS Center of Research Excellence in Smartgrids Technologies, Phase II", National Science Foundation CREST, \$5,000,000, 02/20-01/25.
- Co-PI, "Preparing Highly Qualified Students with Financial Need for Careers in Computing and Cyber-Security through Evidence-Based Educational Practices," National Science Foundation, \$3,969,000, 10/18-09/23.
- NMSU Lead, "Towards a SMART Grid Sustainable, Modular, Adaptive, Resilient and Transactive," National Science Foundation EPSCoR Track I, \$20,000,000 (NMSU Share: \$7,316,925), 09/01/18-08/31/23.
- NMSU Lead, "CAHSI INCLUDES Alliance," National Science Foundation INCLUDES Program, \$9,500,000 (NMSU Share, \$1,300,000), 09/01/18-08/31/23.

Past Research Grants

- PI, "An open infrastructure to disseminate phylogenetic knowledge," NSF ABI, \$316,961, 7/15-5/20.
- PI, "Trackable Interactive Multimodal Manipulatives: Towards a Tangible Learning Environment for the Blind," NSF GARDE, \$264,165, 10/14-12/19.

- PI, "YO-GUTC: Young Women Growing Up Thinking Computationally", National Science Foundation, \$380,000, 01/15-12/20.
- PI, "iCREDITS: interdisciplinary Center of Research Excellence in Intelligent Technologies for Smartgrids", National Science Foundation (CREST), \$5,000,000, 02/01/2014-01/31/2020.
- PI, "EPSCoR Outreach Subcontract," New Mexico NSF EPSCoR RII-4 Track 1, \$280,000, 4/16-11/18.
- Co-PI, "CAHSI INCLUDES Pilot," National Science Foundation, \$200,000, 08/16-11/18.
- Co-PI, (PI: Ann Gates, UTEP), "BPC-AE: Computing Alliance of Hispanic-Serving Institutions," NSF BPC, \$3,000,000, 8/10-8/18.
- Co-PI, (PI; Jonathan Cook), "Graduate Assistants in Areas of National Need", Department of Education, \$339,000, 9/12-8/16.
- Co-PI, (PI: Jonathan Cook), "Acquisition of an Instrument for Research in Irregularly Parallel Big Data Computation," National Science Foundation (MRI), \$215,000, 09/13-08/17.
- PI, (Co-PIs: Susan Brown), "Computing in Context: Advancing Computational Thinking in the Classroom through Applied Computational Research," NSF GK-12, \$2,400,000, 2/1/10-6/16.
- Co-PI, (PI: Arlin Stoltzfus, NIST), "Data Interoperation Working Group", National Evolutionary Synthesis Center, \$30,000, 4/11-6/15.
- PI, (Co-PIs: I. Pivkina, K. Villaverde), "Empowering Southern New Mexico Women in Computing", NSF BPC, \$619,000, 9/08–5/13.
- PI, (Co-PIs: S. Tran, O. Ma, D. Simon), "Analytical and Exploratory Approaches to Communicate Mathematics to Visually Impaired Students", NSF RAPD, \$240,000, 9/08–5/13.
- PI, "Protein Structure Prediction for Virus Particles", Army High Performance Computing Center, \$220,000, 1/10-12/11.
- Co-PI, (PI: S. Tran), "Approximation Based Reasoning and Planning", NSF IIS, \$340,000, 9/08–8/12.
- PI, (Co-PIs: D. Ranjan, M. Song, B. Milligan) "CREST: Center of Research Excellence in Bioinformatics and Computational Biology", NSF CREST, \$4,500,000, 9/04–7/11.
- Co-PI, (PI: C. Gonazales, Co-PI: C. Jeffery) "Establishing a Virtual Community for Computer Science in New Mexico", National Science Foundation, ATE Program, \$840,000, 9/04–8/08.

- PI, (Co-PIs: R. Hartley, D. Ranjan, S. Tran, H. Leung) "Frameworks for the Development of Scalable and Distributed Knowledge-based Systems", Minority Institution Infrastructure, NSF, \$1,500,000, 2002/2009.
- PI, (Co-PIs: A. Stoltzfus, J. Thompson), Short-term Visit Grant, National Evolutionary Synthesis Center (NESCent), 2008.
- PI, (Co-PIs: I. Pivkina, V. Dahl, M. Hermenegildo), "Summer School in Constraint Logic Programming", CRA-W/CDC, \$28,000, 2007-2008.
- PI, (Co-PIs: D. Ranjan, J. He, I. Pivkina, T.C. Son) "Enhancing Participation of High-School Women to Computer Science through Bioinformatics Training and Research", NSF BPC, \$197,000, 4/1/2006–3/31/2008.
- Co-PI, (PI: J. He, Co-PI: D. Ranjan) "From Low Resolution Protein Structure to Near Atomic Resolution Structure", NMSU/LANL MOU, \$122,000, 2005-2006.
- Co-PI, (PI: C. Jonsson (U. Alabama), Co-PI: D. Ranjan, S. Tran) "Collaborative Research: The Impact of Rapid Anthropogenic Land Cover Change in the Chaco Interior Atlantic Forest in Paraguay on Hantavirus Ecology", NIH, \$186,748, 5/04–4/08.
- Co-PI, (PI: D. Ranjan) "Graduate Assistants in Areas of National Need", Department of Education, \$200,000, 2003-2006.
- PI, "REU Supplement to MII Grant", National Science Foundation, \$18,000, 2003-2007.
- Co-PI, (PI: B. Milligan, Co-PI: T.C.Son) "Phylogenetic Predictions of the Capabilities of Novel Bio-threat Agents", LANL/NMSU MOU, \$130,000, 2005-2006.
- PI, (Co-PIs: T.C. Son, K. Villaverde, D. Ranjan) "Computing Support for the Next Generation Application-driven Declarative Programming Systems", NSF, Computing Research Infrastructure, \$103,000, 8/1/05-7/31/07.
- PI, (Co-PIs; De. Ranjn, J. He) "Development of a Bioinformatics Module for ChemVC", SBIR/STTR Supplement, Mesa Analytics Inc. \$150,000, 8/1/2006—7/31/2007.
- Co-PI (PI: A. Karshmer, Co-PIs: G. Gupta, K. Misienberger) "Development of a Tool to Enhance Communication between Blind and Sighted Mathematicians, Students, and Teachers", Department of Education, \$423,000, 2001/05.
- Co-PI, (PI: R. Hartley) "Mobility in the Classroom", Hewlett Packard, \$200,000, 2003-2004.
- Co-PI, (PI: J. Cook, Co-PI: E. Johnson) "Itanium 2 Grant Initiative", Hewlett-Packard, \$60,000, 2003-2004.

- Co-PI, (PI: R. Hartley, 10 other Co-PIs) "Management of Dynamic and Irregular Parallelism in Symbolic and Scientific Computing", Minority Institution Infrastructure, NSF, \$1,500,000, 1998/2004.
- PI, "Parallel and Distributed Constraint Programming", CAREER Program, National Science Foundation, \$200,000, 1999/2004.
- Co-PI, (PI: D. Ranjan) "REU-Supplement, Data structures for advanced programming languages implementation", NSF, \$12,000, 2002/04.
- Co-PI, (PI: B. Milligan; Co-PIs: D. Ranjan, C. Johnson) "Functional Bioinformatics of Hantavirus", NIH SCORE, 2002/04.
- PI, (with D. Ranjan, G. Gupta, and B. Milligan) "Translator Technology for Bioinformatics Software Tools", National Biotechnology Information Facility, \$90,000, 2000/2001.
- Co-PI, (PI: D. Ranjan; Co-PI: G. Gupta) "Dynamic Data Structures in Advanced Programming Languages Implementation", National Science Foundation, \$215,000, 2000/2002.
- Co-PI, (PI: G. Gupta) "NSF-CNpQ: Implementation and Compilation of High-Performance Scalable Parallel Constraint Programming Systems", National Science Foundation, \$140,000, 1999/2002.
- PI, (Co-PI: A. Karshmer, G. Gupta, and D. Gillan) "Non-Visual Browing of the World-Wide Web: Tables, Frames, and Forms", National Science Foundation, \$575,000, 1999/2002.
- PI, (with D. Ranjan, S. Tran, and K. Villaverde) "Parallel Logic and Constraint Programming with Applications to Planning and Web Accessibility", National Science Foundation, Research Resources (equipment only), \$60,000, 2001/02.
- PI, (Co-PI: E. Johnson) "Execution and Performance Evaluation of Parallel Logic Programming on Itanium/McKinsley Platforms", Hewlett Packard, \$91,000, 2002-2003.
- Co-PI, (PI: E.G. Omodeo), Travel Grant to Offer Seminars at the University of Verona and Udine, \$3,000, Summer 2000.
- PI, (Co-PI: G. Gupta) "WEB-KLIC: A concurrent language for Internet Programming", AITEC Japan, \$12,000, 1998/99.
- Co-PI, (PI: A. Karshmer, Co-PI: G. Gupta) "An Efficient Concurrent Logic-based Framework for Symbolic and Internet Computing", \$18,000, Fullbright, 1998/99.
- Co-PI, (PI: G. Gupta) "WEB-KLIC: A concurrent language for Internet Programming", AITEC Japan, \$14,000, 1997/98.

- Co-PI, (PI: G. Gupta, Co-PI: J. Wiebe, D. Ranjan) "Parallel Constraint Logic Programming on Multiprocessor PCs", Research Instrumentation, \$38,000, NSF, 1998/99.
- PI, "Internationalization Supplement Grant", New Mexico State University, \$500, 1998.
- Co-PI, (PI: G. Gupta) "Internationalization Grant for Collaborations with Mexico", New Mexico State University, \$500, 1998.
- PI, Minigrant, College of Arts and Science, New Mexico State University, \$600, 1998.

Professional Activies

University and Department Service

- Vice-Chair, Human Resources Appeal Board, 2018-present.
- Director, Knowledge representation, Logic, and Advanced Programming (KLAP) laboratory, 2001-present.
- Director, iCREDITS Center for Smart Grid Technologies, NMSU, 2014-present.
- Director, CREST Center for Research Excellence in Bioinformatics and Computational Biology, 2008-2012.
- Member, NMSU Faculty Advisory Committee on Technology, 2013-2015.
- Member, NMSU Faculty Senate, 2011-2014.
- Member, NMSU University Budget Committee, 2012-2014, 2016-2017.
- Chair, Computer Science Faculty Search Committee, 2007-2009.
- Chair, College of Arts&Sciences, Faculty Affairs and Promotion & Tenure Committee, 2007-2009.
- Member, College of Arts&Sciences, Outstanding Faculty Achievement Award Committee, 2007.
- Member, College of Arts&Sciences Faculty Affairs and Promotion & Tenure Committee, 2005-2009.
- Member, Recruitment Committee for the Associate Dean of the College of Arts and Sciences, 2004.
- Member, NMSU University Research Council, 2004-2005
- Chair, Department Graduate Committee, 2004–2009

- Chair, Department Award Committee, 1999–2009
- Chair, Department Research Committee, 2002–2004
- Chair, Department Facilities Committee, 2009-2014

Outreach Initiatives

- Vice-Chair and Treasurer, New Mexico Computer Science Teachers Association;
- Co-Leader, New Mexico Chapter, National Girls Collaborative Project, 2002-2004.
- Director, Pathways in Computer Science Program (2002–2008); the program led to a significant increase in retention throughout the gateway classes in the undergraduate Computer Science program, and an increase in transition form the undergraduate to the graduate program.
- Director, Young Women in Computing Program (2006–present): the program provides opportunities for K-16 women to participate in Computer Science training programs. The program has already served over 15,000 students.
- Director, CREST Bioinformatics outreach program (2004–2014): the program provides training opportunities in Computer Science and Bioinformatics to high school and community college students.
- Member, Leadership Team, Computing Alliance of Hispanic Serving Institutions (CAHSI), 2009-present.
- Director, 2008 Summer School in Logic Programming and Computational Logic: the school, supported by funds from NSF and from the Computing Research Association, was attended by 38 students from all over the US (MS and Doctoral students).
- Chair, Doctoral Consortium in Logic Programming (2005–2007): I have created this program, which has become an annual event. The DC in Logic Programming takes place each year, during the annual International Conference on Logic Programming, and it enables young researchers in logic programming to present their preliminary research work and receive mentoring from experts in the field.
- Chair, Doctoral Consortium in Assistive Technologies (2004).
- Co-Chair, Young Researchers Program, International Conference on Computers Helping People with Disabilities (ICCHP), 2008-2014.

Editorial Work

- Editor-in-Chief (with Dr. Dovier), Newsletter of the Association of Logic Programming (over 1,300 members), 2003-present.
- Editorial Board Member, ACM Transactions on Accessible Computing.

- Editorial Board Member, Journal of Logic and Algebraic Methods in Programming (JLAMP).
- Editorial Board Member, Energies Open Access Energy Research, Engineering and Policy Journal.
- Editorial Board Member, Artificial Intelligence Research (AIR)
- Editorial Board Member, Universal Access in the Information Society (UAIS)
- Area Editor for Software Engineering and Methodologies, Theory and Practice of Logic Programming (TPLP)

• Guest Editor:

- Journal of Functional and Logic Programming, Special Issue on Parallelism and Implementation Technology for Constraint Logic Programming, 1999.
- Implementation of Logic and Constraint Logic Programming, Nova Science Publishers, 1999.
- Journal of Functional and Logic Programming, Special Issue on Practical Aspects of Declarative Languages, 2001.
- Journal of Behavior and Information Technology, Special Issue on Computers and Accessibility, 2006.
- Theory and Practice of Logic Programming, Special Issues on International Conference on Logic Programming, 2011.
- Theory and Practice of Logic Programming, Special Issue on Parallel and Distributed Logic Programming, 2017.
- Theory and Practice of Logic Programming, Special Issue celebrating the 20th anniversary of the journal, 2019-2021.

Conference/Workshops Chair

Conference Chair

- Organizing Chair, Symposium on Practical Aspects of Declarative Languages, San Antonio, TX, 1999.
- Program and Conference Chair (with V. Santos Costa), Symposium on Practical Aspects of Declarative Languages, Boston, MA, 2000.
- Program Chair, ACM International Conference on Assistive Technologies, Baltimore, MD, 2005.
- General Chair, ACM International Conference on Computers and Accessibility (ASSETS), Tempe, AZ, 2007.
- Program Chair, International Conference on Logic Programming, 2008.
- Program Chair, Declarative Aspects of Multicore Programming, 2010.

- Program Chair, Symposium on Practical Aspects of Declarative Languages, Portland, OR, 2015.
- General Chair, International Conference on Logic Programming, Las Cruces, NM, 2019

Workshop Chair

- Logic Programming Week, Las Cruces, NM, 1993.
- Workshop on Parallel Logic Programming, Ithaca, NY, 1994;
- NATO Maple Meeting, Portland, OR, 1995.
- Workshop on Parallelism and Implementation Technology for (Constraint) Logic Programming Languages, Bonn, Germany, 1996;
- Workshop on Parallelism and Implementation Technology for (Constraint) Logic Programming Languages, Port Jefferson, NY, 1997.
- Workshop on Parallelism and Implementation Technology for (Constraint) Logic Programming Languages, Las Cruces, NM, 1999.
- Workshop on Parallelism and Implementation Technology for (Constraint) Logic Programming Languages, London, UK, 2000.
- CICLOPS 2001, Colloquium on Implementation of Constraint and LOgic Programming Systems, Cyprus, 2001.
- Co-chair, Workshop on Constraint Programming beyond Finite Domains, Sitges, Spain, 2005.
- Co-Chair, Colloquium on Implementation of Constraint Logic Programming Systems (CICLOPS), Seattle, 2006.
- Co-Chair, Workshop on Reasoning with Preferences, Seattle, 2006.
- Co-Chair, International Workshop on Constraint Programming and Decision Making, Lyon, France, 2010.
- Co-Chair, International Workshop on Logic Programming and Multiagent Systems, Lexington, KY, 2011.
- Workshop Chair, AAAI Workshop on Artificial Intelligence in Smart Grids and Smart Buildings, 2016.
- Workshop Co-Chair, IJCAI Workshop on Knowledge-Based Techniques for Problem Solving and Reasoning (KnowProS), 2016.
- Workshop Chair, AAAI Workshop on Artificial Intelligence in Smart Grids and Smart Buildings, 2017.

Others

- Member of the organizing committee of the APPIA/GULP/PRODE Joint Conference on Declarative Programming, 1997.
- Workshops Chair and Coordinator, International Conference on Logic Programming, Las Cruces, NM, 1999.
- Co-organizer, First Summer School on Constraint Logic Programming, Las Cruces, NM 1999.
- Publicity Chair, International Conference on Tools with AI, Dallas, TX, 2001.
- Co-Organizer: Second Summer School on Constraint Logic Programming, Dallas, June 2004.
- Doctoral Consortium Chair, International Conference on Assistive Technologies, ACM, Atlanta, 2004.
- Doctoral Consortium Chair, International Conference on Logic Programming, Barcelona, Spain, 2005.
- Thematic Session Chair & Organizer: Non-visual Accessibility of the Web, HCI International 2005, Las Vegas, 2005.
- Doctoral Consortium Chair, International Conference on Logic Programming, Seattle, USA, 2006.
- Doctoral Consortium Chair, International Conference on Logic Programming, Porto, Portugal, 2007.
- Young Researchers Consortium, Co-Chair (with P. Blenkhorn), International Conference on Computers Helping People with Special Needs (ICCHP), Linz, Austria, 2008.
- Director, Third International Summer School on Logic Programming and Computational Logic, Las Cruces, NM, July 2008.
- Young Researchers Consortium, Co-Chair (with D. Archambault), International Conference on Computers Helping People (ICCHP), Vienna, Austria, 2010.
- Young Researchers Consortium, Co-Chair (with D. Archambault), International Conference on Computers Helping People (ICCHP), Linz, Austria, 2012.
- Young Researchers Consortium, Co-Chair (with D. Archambault), International Conference on Computers Helping People (ICCHP), Linz, Austria, 2014.
- Young Researchers Consortium, Co-Chair (with D. Archambault), International Conference on Computers Helping People (ICCHP), Linz, Austria, 2016.
- Mentoring Chair, International Conference on Computers and Accessibility (ASSETS), 2012.

- Workshop Chair, International Conference on Logic Programming, 2017.
- Track Chair, Bioinformatics, International Conference on Principles and Practice of Constraint Programming, 2017.

Reviewing and Refereeing Work

Site Visitor

- Graduate Program Review Team, University of Texas at San Antonio, 2008.
- Graduate Program Review Team, Texas A&M University, Corpus Christi, 2015.
- Board of Advisors, Department of Computer Science, University of Texas at El Paso, 2017.
- Board of Advisors, Department of Computer Science, University of New Mexico, 2019.

Invited Talks

- Universidad Politecnica de Madrid, Spain (1993)
- University of Texas at El Paso (1995, 1996)
- University of Udine (1991, 1995, 2000)
- University of Verona (2000)
- Ohio University (1997)
- Texas Tech University (2001, 2006)
- First Summer School on Constraint Logic Programming (2000)
- COLOGNET Workshop on Computational Logic, Madrid (2002)
- Panelist, "Future of Logic Programming Languages", Sitges, Spain (2005)
- SUNY Stony Brook (2005)
- University of Texas at Dallas (2006)
- Arizona State University (2006)
- University of Texas at El Paso (2006)
- University of Udine, Italy (2006)
- University of Porto, Portugal (2006)

- New Mexico State University (2007)
- International Workshop on Applications of Logic Programming in the Web, Semantic Web, and Semantic Web Services (ALPSWS2007), Porto (2007)
- Italian Conference on Computational Logic, Perugia, Italy (2008)
- Portland State University, Portland, OR (2008)
- Third Summer School on Logic Programming and Computational Logic (2008)
- @Science Conference on Science and Accessibility, Milan, Italy (2008)
- Workshop on Constraint Programming and Decision Making, El Paso, TX (2008)
- Practical Aspects of Declarative Languages, Madrid (2010).
- Workshop on Logic Programming and Constructive Mathematics, Lexington, KY (2011).
- Workshop on Constraint Programming and Decision Making, El Paso, TX (2011).
- International Doctoral Consortium on Logic Programming, Budapest, Hungary (2012).
- Logic Programming: Systems and Applications, Symposium, SUNY Stony Brook, NY (2012).
- Interdisciplinary Ph.D. Spring School, University of Udine, Italy (2013).
- NSF Workshop on High-Level Programming Models for Parallelism, Washington, DC (2013).
- CAHSI Summit, San Juan, Puerto Rico (2015).
- Summer School on Constraint and Logic Programming, Genova, Italy (2015).
- Winter School on Logic Programming and Bioinformatics, Udine, Italy (2015).
- Tutorial, Pacific-Rim Conference on Artificial Intelligence, Phuket, Thailand (2016).
- Tutorial, International Conference on Automated Planning and Scheduling, Pittsburgh (2017).
- Invited Speaker, International Conference on Logic Programming, Melbourne, Australia (2017).
- Tutorial, Italian National Conference on Computational Logic, Trieste, Italy (2019).
- Special Speakers Series, University of North Texas (2019)

Miscellaneous

- External Proposal Reviewer, Fund for Scientific Research, Belgium (2017-present).
- External Proposal Reviewer, Research Foundation Flanders, 2011, 2012, 2013.
- Panel Member, Italian Medicine Agency (AIFA), 2015.
- Panel Member, Italian Ministry of Health, 2011-2020.
- Consultant for the CollegeBoard review of the new AP Computer Science exam, 2013.
- Invited participant, NSF Ideas Lab on Big Data in Learning, Atlanta, GA, 2013.
- Invited participant, NSF Workshop on High Level Programming Models for Parallelism, Arlington, VA, 2013.
- Invited participant, workshop on mathematics and accessibility, Paris, 2008.
- Nomination Committee Chair, Impact Award, ACM SIGACCESS, 2008.
- Panel member, Panel on Multi-core Architectures and Declarative Programming Languages, at Colloquium on Implementation of Constraint Logic Programming Systems (CICLOPS), Porto, 2007.
- Panel member, National Science Foundation Workshop on Future of the Human-Computer Interaction Program, 2006.
- Invited Participant, Google Faculty Summit, 2006.
- Nominating Committee Chair, ACM SIGACCESS Officers Elections, 2006.
- Panel member, "Future of Logic Programming Language", Sitges, Spain, 2005.
- External Collaborator, MURST Project "Integration of Constraint Solvers for Sets and Finite Domains", University of Parma, Italy, 2003-2007.
- Invited Participant, NSF/ICOT workshop on Parallel Logic Programming, Eugene, Oregon, 1994.
- Invited Speaker, First Shell Workshop on Logic Programming, Actions, and Non-monotonic Reasoning, 1995.
- Member of the IGroup UMA, an international organization aimed at promoting the development of tools to improve accessibility of mathematics for visually impaired individuals.

Professional Affiliations

- Association for Computing Machinery
- Association for Logic Programming
- ACM Special Interest Group in Accessibility (SIGACCESS)
- ACM Computer Science Teachers Association

Recent Collaborators

- Dominique Archambault (Marie and Pierre Curry University, France)
- Marcello Balduccini (Drexel University)
- Chitta Baral (Arizona State University, USA)
- Mohsen Beheshti (California State University Dominguez Hills, USA)
- Susan Brown (NMSU)
- Mats Carlsson (Swedish Institute for Computer Science, Sweden)
- Manuel Carro (Politecnica de Madrid, Spain)
- Alessandro dal Palù (University of Parma, Italy)
- Agostino Dovier (University of Udine, Italy)
- Donal Fitzpatrick (Dublin City University, Ireland)
- Andrea Formisano (University of Perugia, Italy)
- Ann Gates (University of Texas at El Paso, USA)
- Gregory Gelfond (University of Nebraska at Omaha, USA)
- Michael Gelfond (Texas Tech University, USA)
- Gopal Gupta (University of Texas at Dallas, USA)
- Manuel Hermenegildo (Politecnica de Madrid, Spain)
- Irene Lee (MIT, USA)
- Chongbing Liu (Shell Inc., USA)
- Lenging Liu (Microsoft Research, USA)

- Andrea Mammoli (University of New Mexico, USA)
- Klaus Miesenberger (Universität Linz, Austria)
- Brian O'Meara (University of Tennessee, Knoxville)
- Tu Phan (Microsoft Research, USA)
- Satish Ranade (New Mexico State University, USA)
- Chiaki Sakama (Wakayama University, Japan)
- Nayda Santiago (University of Puerto Rico Mayaguez)
- Vitor Santos Costa (University of Porto, Portugal)
- Arlin Stoltzfus (National Institute of Standards and Technology, USA)
- Son Cao Tran (New Mexico State University, USA)
- Mirek Truszczynski (University of Kentucky, USA)
- William Yeoh (NMSU)
- Jun Zheng (New Mexico Institute of Technology, USA)

Teaching and Advising

- Courses Taught: C Programming, Data Structures, Programming Languages Structure, Programming Languages Semantics, Constraint Programming, Logic Programming, Automata and Formal Languages, Parallel Processing, XML Processing, Semantic Web Programming, Advanced Compilers, Machine Programming, Big Data
- Graduate Students Advising:
 - Doctoral Advisor: Karen Villaverde (Ph.D. 2002), E. Saad (Ph.D., 2005), I. Elkabani (Ph.D., 2006), H. Le Viet (Ph.D., 2007), O. El-Khatib (Ph.D., 2007), Yu Pan (Ph.D., 2007), Chongbing Liu (Ph.D., 2008), Iyad Abu Doush (Ph.D., 2009), Antonio Arredondo, Abdulla Alqaddoumi (Ph.D., 2016), Ben Wright (Ph.D., 2019), Nancy Alajarmeh (Ph.D., 2014), Ferdinando Fioretto (Ph.D., 2016), Federico Campeotto (Ph.D., 2014), Saurabh Gupta (Ph.D., 2014), Rajaa Shindi (iDOC, 2012), Ahmad Al-Jarrah (Ph.D., 2016), Emmanuel Utreras (Ph.D., 2021), Muhanand Manshad (Ph.D. 2019), Fabio Tardivo.

- Masters Advisor: K. Deopura (1998), Z. Yu (2000), G. Khanuja (2001), A. Jayanti (2002), G. Chen (2002), P. Thota (2001), W. Xiong (2001), I. Flores Mendoza (2001), F. Bermudez (2001), N. Bodla (2003), K. Kutikala (2002), H. Al-Sheboul (2002), C. Wallace (2002), M. Bokam (2003), H. Poogalia (2003), S. Wu (2003), R. Reddy (2005), Y. Wu (2003), S. Thodupunuri (2004), X. Xiao (2005), I. Strascina (2004), S. Dange (2004), Y. Flores Mendoza (2003), R. Shindi (2006), J. Cabrera (2004), N. Javaher (2005), B. Dharmana (2005), V. Vegi (2005), S. Pinnamaraju (2006), N. Arkatala (2006), S. Syed (2006), F. Mohammed (2006), S. Alluri (2007), K. Chopperla (2007), S. Kalapala (2007), A. Shah (2007), R. Naviri (2007), J. Pinto (2008), A. Gaddam (2007), V. Mekala (2007), R. Mangalagiri (2007), A. Chavali, A. Hariharan, S. Gaddam (2008), B. Palmer (2007), Antonio Arredondo (2009), B. Chisham, B. Wright (2009), S. Inapurapu (2011), S. Punugu (2010), L. Rajaram (2010), M. Manshad (2014), S. Ramamoorthy (2011), A. Al-Shoraman (2012), F. Fioretto (2011), N. Nesiba (2016), F. Fabiano (2018), Paolo Grignaffini (2019).
- Laurea: Co-supervised Francesco Pulvirenti in his Laurea degree (Italy); Co-supervised Alessandro Dal Palu in his Laurea degree (Italy); co-supervised Federico Igne (Italy); co-supervised Marco De Bortoli (Italy); co-supervised Stefano Tognazzi (Italy)
- External Member: M. Carro (Ph.D., 2001, Universidad Politecnica de Madrid, Spain), E. Correia (Ph.D., 2002, Universidade do Porto, Portugal), T. Conway (Ph.D., 2002, University of Melbourne, Australia), A. Dal Palù (Ph.D., 2002, University of Udine, Italy), D. Cabeza (Ph.D., 2004, Universidad Politecnica de Madrid), M. Nogueira (Ph.D., 2003 University of Texas at El Paso), Robert Pokorny (Ph.D., 2005, SUNY Stony Brook), M. Marchi (Ph.D., U. of Milano, 2006), M. Zantoni (Ph.D., U. of Udine, 2007), Hung Duy Nguyen (Asian Institute of Technology, Thailand, 2012), Paul Bone (University of Melbourne, Australia, 2013).

PUBLICATIONS

Journal Papers

- 1. A.Dovier, E.G.Omodeo, E.Pontelli, G.Rossi "{log}: A Language for Programming in Logic with Finite Sets", *Journal of Logic Programming*, Elsevier Science Publishers, 28(1), pg. 1–44, July 1996.
- 2. M. Carro, G. Gupta, M. Hermenegildo, E. Pontelli "Improving the Efficiency of Nondeterministic Independent And-parallel Systems" Vol. 22, No. 2/3, Computer Languages, pages 115–142 Elsevier, 1996.
- 3. E. Pontelli, G. Gupta. "Parallel Symbolic Computation in ACE", Annals of Mathematics and Artificial Intelligence, special issue on Logic Programming, Nonmonotonic Reasoning and Actions, 21, pg. 359-395, 1997.
- 4. D. Ranjan, E. Pontelli, G. Gupta. "Efficient Algorithms for the Temporal Precedence Problem", Information Processing Letters, 68:71–78, 1998.

- 5. D. Ranjan, E. Pontelli, L. Longpre, G. Gupta. "The Temporal Precedence Problem", Algorithmica, 28(3):288–306, 2000.
- 6. E. Pontelli and G. Gupta. "Extended Dynamic Dependent And-Parallelism in ACE", Journal of Functional and Logic Programming, Volume 1999, Special Issue 1, MIT Press.
- 7. D. Ranjan, E. Pontelli, G. Gupta. "On the Complexity of Or-Parallelism", New Generation Computing, Vol. 17, No. 3, pp. 285–307, 1999.
- 8. E. Pontelli, D. Ranjan, G. Gupta. "The Complexity of Late-binding in Highly Dynamic Object-Oriented Languages", Journal of Functional and Logic Programming, December 1999.
- 9. A. Dovier, E. Pontelli, G. Rossi. "A Necessary Condition for Constructive Negation in Constraint Logic Programming", Information Processing Letters, Vol. 74, 2000.
- 10. D. Ranjan, E. Pontelli, G. Gupta. "Data Structures for Order-sensitive Predicates in Parallel Nondeterministic Systems", ACTA Informatica, Vol. 37, No. 1, pp. 21–43, 2000.
- 11. A. Dovier, E. Pontelli, G. Rossi. "Constructive Negation and Constraint Logic Programming with Sets", New Generation Computing, 19(3), 2001.
- 12. A. Dovier, C. Piazza, E. Pontelli, G. Rossi. "Sets and Constraint Logic Programming", ACM Transactions on Programming Languages and Systems, Vol. 22, No. 5, 2000.
- 13. E. Pontelli, G. Gupta "Backtracking in Independent And-Parallel Implementations of Non-Deterministic Languages", IEEE Transactions on Parallel and Distributed Processing, 12(11):1169–1189, 2001.
- 14. G. Gupta and E. Pontelli. "Optimization Schemas for Parallel Implementation of Non-deterministic Languages and Systems", Software Practice & Experience, Vol. 31, No. 12, 1143–1181, 2001.
- 15. E. Pontelli, G. Gupta, K. Ali, M. Carlsson, M. Hermenegildo. "Parallel Execution of Prolog Programs", ACM Transactions on Programming Languages and Systems, 23(4):472–602, 2001.
- 16. G. Gupta and E. Pontelli. "Automatic Generation of Provably Correct Parallelizing Compilers", Parallel Computing Journal, (to appear).
- 17. E. Pontelli, D. Ranjan, A. Dal Palù. "An Optimal Data Structure to Handle Dynamic Environments in Non-Deterministic Computations", Computer Languages, 28(2):181–201, 2002.
- 18. E. Pontelli and D. Ranjan. "The Level Ancestor Problem on Pure Pointer Machines", Information Processing Letters, 85(5):275–283, 2002.
- 19. E. Pontelli, D. Gillan, G. Gupta, A. Karshmer, E. Saad, W. Xiong. "Intelligent Non-visual Navigation of Complex HTML Structures", Universal Access in the Information Society, 2(1):56–69, 2002.

- 20. E. Pontelli, D. Ranjan, B. Milligan, G. Gupta. "Design and Implementation of a Domain Specific Language for Phylogenetic Inference", Journal of Bioinformatic and Computational Biology, 1(2):201–230, 2003.
- 21. E. Pontelli and T.C. Son. "Designing Intelligent Agents to Support Universal Accessibility of the World Wide Web", Journal of Electronic Commerce Research and Applications, 2(2-3), 2003.
- 22. A. Dovier, C. Piazza, E. Pontelli. "Disunification in ACI-1 Theories", Constrains, 9(1):35–91, 2004.
- 23. T.C. Son and E. Pontelli. "Prioritized Default Theory in Reasoning about Actions and Planning with Preferences", *Computational Intelligence*, 20(2):358–404, 2004.
- 24. E. Pontelli and D. Ranjan. "A Simple Optimal Solution for the Temporal Precedence Problem on Pure Pointer Machines", In *Theory of Computing Systems*, 38(1):115–130, 2005.
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- 26. M. Balduccini, E. Pontelli, O. Elkhatib, H. Le. "Issues in Parallel Execution of Non-monotonic Reasoning Systems", Parallel Computing Journal, 31:608–647, 2005.
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- 29. A. Dal Palu, E. Pontelli, D. Ranjan. "Sequential and Parallel Algorithms for the NCA Problem on Pure Pointer Machines", In Theoretical Computer Science, 352:108–135, 2006.
- 30. T. Cao Son and E. Pontelli. "A constructive semantic Characterisation of aggregates in asswer set programming", In Theory and Practice of Logic Programming, 7(3):355–375, 2007.
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- 34. T.C. Son, E. Pontelli, T. Phan. "Answer Sets for Logic Programs with Arbitrary Abstract Constraint Atoms", In Journal of Artificial Intelligence Research, 29:353–389, 2007.
- 35. E. Saad and E. Pontelli. "New Approach to Hybrid Probabilistic Logic Programs", In Annals of Mathematics and Artificial Intelligence, 48(3–4):187–243, 2006.
- 36. A. Dal Palu, A. Dovier, E. Pontelli. "A Constraint Solver for Discrete Lattices, its Parallelization, and Application to Protein Structure Prediction", In Software Practice & Experience, 37(13):1405–1449, 2007.
- 37. A. Dovier, A. Formisano, E. Pontelli. "An Empirical Study of Constraint Logic Programming and Answer Set Programming Solutions of Combinatorial Problems", In Journal of Experimental and Theoretical Artificial Intelligence, 21(2):79–121, 2009.
- 38. A. Dovier, A. Dal Palu, E. Pontelli. "Computing Approximate Solutions of the Protein Structure Determination Problem using Global Constraints on Discrete Crystal Lattices", International Journal of Data Mining and Bioinformatics, 4(1):1–20, 2010.
- 39. G. Grossi, M. Marchi, E. Pontelli, A. Provetti. "Experimental Analysis in Graph-Based Answer Set Computation over Parallel and Distributed Architectures", Journal of Logic and Computation, 19:697–715, 2008.
- 40. E. Pontelli, T. Son, O. Elkhatib. "Justifications for Answer Set Programming", Theory and Practice of Logic Programming 9(1):1–56, 2009.
- 41. P.H. Tu, E. Pontelli, T.C. Son, S. To. "Applications of Parallel Processing Technologies in Heuristic Search Planning: Methodologies and Experiments", Concurrency and Computation, 21(15):1928–1960, 2009.
- 42. B. Chisham, F. Prosdocimi, E. Pontelli, A. Stoltzfus, J. Thompson. "Initial Implementation of a Comparative Data Analysis Ontology", Evolutionary Bioinformatics, 5:47–66, 2009.
- 43. E. Pontelli, H. Le, T.C. Son. "An Investigation in Parallel Execution of Answer Set Programs on Distributed Memory Platforms: Task Sharing, and Dynamic Scheduling", Computer Languages, Systems, and Structures, 36(2):158–202, 2010.
- 44. A. Dal Palú, A. Dovier, E. Pontelli, G. Rossi. "GASP: Answer Set Programming with Lazy Grounding", Fundamenta Informaticae, 96(3):297–322, 2009.
- 45. E. Pontelli, D. Bevan, M. Chapman, J. He, J. MacCuish, N. MacCuish, D. Moreland, J. Pinto, X. Qin. "BIOPS Interactive, An E-Learning Platform Focused on Protein Structure and DNA", BioScene, 35(2):6–15, 2009.
- 46. E. Pontelli, L. Liu, T. Son, M. Truszczynski. "Logic Programs with Abstract Constraint Atoms: The Role of Computations", Artificial Intelligence Journal, 174(3–4):295–315, 2010.
- 47. A. Dovier, A. Formisano, E. Pontelli. "Multi-valued Action Languages with Constraints in CLP(FD)", Theory and Practice of Logic Programming, 10(2):167–235, 2010.

- 48. G. Gelfond, C. Baral, E. Pontelli, T. Son. "Using Logic Programming for Finding Models in the Logics of Knowledge and its Applications", Theory and Practice of Logic Programming, 10(4–6):675–690, 2010.
- 49. A. Dal Palu, A. Dovier, F. Fogolari, E. Pontelli. "CLP-based Protein Fragment Assembly", Theory and Practice of Logic Programming, 10(4–6):709–724, 2010.
- 50. I. Abu Doush, E. Pontelli, T. Son, D. Simon, O. Ma. "Multimodal Presentation of Two-dimensional Charts: An Investigation Using Open Office XML and Microsoft Excel", ACM Transactions on Accessible Computing, 3(2):8, 2010.
- 51. A. Dovier, A. Formisano, and E. Pontelli. "An Investigation of Multi-Agent Planning in CLP", Fundamenta Informaticae, (to appear).
- 52. B. Chisham, B. Wright, T. Le, T. Son, E. Pontelli. "CDAO-Store: Ontology-driven Data Integration for Phylogenetic Analysis," BMC Bioinformatics, 12:98, 2011.
- 53. A. Dovier, A. Formisano, E. Pontelli. "Autonomous Agents Coordination: Action Languages meet CLP(FD) and Linda", Theory and Practice of Logic Programming, 13(2):149-173, 2013.
- 54. K. Nguyen, V. Tran, T. Son, E. Pontelli. "A Conformant Planner Based On Approximation: CpA(H)", ACM Transactions on Intelligent Systems and Technology, 4(2), 2013.
- 55. I. Abu Doush and E. Pontelli. "Non-visual navigation of spreadsheets: Enhancing accessibility of Microsoft Excel", Universal Access in the Information Society, 12(2):143-159, 2013.
- 56. C. Liu and E. Pontelli. "Techniques to Enhance Efficiency and Effectiveness of Inductive Logic Programming Systems: The TWEETY Approaches," Journal of Experimental and Theoretical Artificial Intelligence, (to appear), 2013.
- 57. A. Stoltzfus, H. Lapp, N. Matasci, H. Deus, B. Sidlauskas, C. M. Zmasek, G. Vaidya, E. Pontelli, et al. "Phylotastic! Making tree-of-life knowledge accessible, reusable and convenient." BMC Bioinformatics 14, 2013.
- 58. T. Cao Son, E. Pontelli, C. Sakama, H. Nguyen. "Formalizing Negotiations Using Logic Programming", ACM Transactions on Computational Logic, (to appear), 2013.
- 59. F. Campeotto, A. Dal Palu, A. Dovier, F. Fioretto, E. Pontelli. "A Constraint Solver for Flexible Protein Model," Journal of Artificial Intelligence Research, 48:953-1000, 2013.
- 60. A. Dal Palu, A. Dovier, A. Formisano, E. Pontelli. "CUD@SAT: SAT Solving on GPUs," Journal of Experimental and Theoretical Artificial Intelligence, 27(3):293-316, 2015.
- 61. F. Fioretto, E. Pontelli, A. Dovier. "Constrained Community-based Gene Regulatory Network Inference," ACM Transactions on Modeling and Computer Simulations, 25(2), 2015.

- 62. F. Campeotto, A. Dovier, E. Pontelli. "A Declarative Concurrent System for Protein Structure Prediction on GPU," Journal of Experimental and Theoretical Artificial Intelligence, 27(5):503-541, 2015.
- 63. S. To, T. Son, E. Pontelli. "A generic approach to planning in the presence of incomplete information: Theory and implementation," Artificial Intelligence Journal, 227:1-51, 2015.
- 64. T. Le, T. Son, E. Pontelli, W. Yeoh. "Solving Distributed Constraint Optimization Problems Using Logic Programming," Theory and Practice of Logic Programming, 17(4): 634-683, 2017.
- 65. T. Le, T. Son, E. Pontelli. "Multi-context Systems with Preferences," Fundamenta Informaticae, 158(1-3): 171-216, 2018.
- 66. A. Stoltzfus, M. Rosenberg, H. Lapp, A. Budd, K. Cranston, E. Pontelli, S. Oliver, R. Vos. "Community and Code: Nine Lessons from Nine NESCent Hackathons,", F1000 Research, 6:786, 2017.
- 67. F. Fioretto, E. Pontelli, W. Yeoh, R. Dechter. "Accelerating exact and approximate inference for (distributed) discrete optimization with GPUs." Constraints 23(1): 1-43, 2018.
- 68. F. Fioretto, E. Pontelli, W. Yeoh. "Distributed Constraint Optimization Problems and Applications: A Survey." J. Artif. Intell. Res. 61: 623-698, 2018.
- 69. A. Al-Jarrah, E. Pontelli. "The Collaborative Virtual Affinity Group Model: Principles, Design, Implementation, and Evaluation," International Journal of Computers and Applications, (to appear).
- 70. A. Dal Palu, A. Dovier, A. Formisano, E. Pontelli. "ASP Applications in Bioinformatics: A short tour," KI Künstliche Intelligenz, 32(2-3):157-164, 2018.
- 71. F. Fioretto, A. Dovier, E. Pontelli. "Distributed Multi-Agent Optimization for Smart Grids and Home Automation," Intelligenza Artificiale, 12(2):67-87, 2018.
- 72. Thanh Hai Nguyen, Enrico Pontelli, Tran Cao Son. "Phylotastic: An Experiment in Creating, Manipulating, and Evolving Phylogenetic Biology Workflows Using Logic Programming." Theory and Practice of Logic Programming, 18(3-4): 656-672, 2018.
- 73. Ferdinando Fioretto, Enrico Pontelli, "Past and present (and future) of parallel and distributed computation in (constraint) logic programming." Theory and Practice of Logic Programming, 18(5-6):722-724, 2018.
- 74. V. Nguyen, T. Nguyen, A. Md. Tayeen, H. Laughinghouse, L. Sanchez-Reyes, J. Wiggings, E. Pontelli, D. Mozzherin, B. O'Meara, A. Stoltzfus. "Phylotastic: Improving access to tree-of-life knowledge with flexible, on-the-fly delivery of trees," Evolutionary Bioinformatics, 16, 2020.
- 75. Alessandro Burigana, Francesco Fabiano, Agostino Dovier, Enrico Pontelli, "Modelling Multi-Agent Epistemic Planning in ASP," Theory and Practice of Logic Programming, 20(5):593-608, 2020.

- 76. Abu Saleh Md Tayeen, Thanh Hai Nguyen, Van Duc Nguyen, Enrico Pontelli, "Design and Implementation of Phylotastic, a Service Architecture for Evolutionary Biology," International Journal of Software Engineering and Knowledge Engineering, 30(10):1525-1550, 2020.
- 77. Emmanuel Utreras, Enrico Pontelli. "Introductory programming and young learners with visual disabilities: a review," Universal Access in the Information Society, (to appear), 2021.
- 78. C. Baral, G. Gelfond, E. Pontelli, T. Son, "An Action Language for Multi-Agent Domains," Artificial Intelligent Journal, (to appear), 2021.

Books Edited

- 1. I. Dutra, E. Pontelli, G. Gupta, F. Silva, V. Santos Costa. Parallelism and Implementation Technology for Constraint Logic Programming, Nova Science, 1999.
- 2. E. Pontelli, V. Santos Costa. *Practical Aspects of Declarative Languages*, Springer Verlag, Lecture Notes in Computer Science 1753, 2000.
- 3. E. Pontelli and A. Sears. Computers and Accessibility Proceedings of the ASSETS 2005 Conference, ACM Press, 2005.
- 4. S. Trewin and E. Pontelli. Computers and Accessibility Proceedings of the ASSETS 2007 Conference, ACM Press, 2007.
- 5. M. Garcia de la Banda and E. Pontelli. *International Conference on Logic Programming*, Springer Verlag, Lecture Notes in Computer Science, 2008.
- 6. A. Dovier and E. Pontelli. 25 Years of Logic Programming Research in Italy, Springer Verlag, 2010.
- 7. L. Petersen and E. Pontelli. Proceedings of the Declarative Aspects of Multicore Programming Workshop, ACM Press, 2010.
- 8. E. Pontelli and T. Son. Proceedings of the Symposium on Practical Aspects of Declarative Languages, Springer Verlag, 2015.

Edited Journals (Special Issues)

- 1. F. Fioretto and E. Pontelli. Special Issue of *Theory and Practice of Logic Programming*, parallel, distributed and concurrent logic programming, 2018.
- 2. M. Garcia de la Banda and E. Pontelli. Special Issue of *Theory and Practice of Logic Programming*, 11(2-3), 2011.
- 3. E. Pontelli and A. Sears. Special Issue of the *Behavior and Information Technology* Journal on "Computers and Accessibility", 25(4), 2006.
- 4. E. Pontelli and V. Santos Costa. Special Issue of the *Journal of Functional and Logic Programming* on "Practical Aspects of Declarative Programming", 2001.

- 5. V. Santos Costa, E. Pontelli, G. Gupta. Special Issue of the *Journal of Functional* and *Logic Programming* on Implementation of Logic and Constraint Programming, 1999.
- 6. I. Dutra, E. Pontelli, V. Santos Costa, G. Gupta, M. Carro, P. Kacsuk. *Parallelism and Implementation Technology for Constraint Logic Programming*, Electronic Notes in Theoretical Computer Science, Volume 30, Issue 3, 2000. (http://www.elsevier.nl/gejng/31/29/23/55/show/Products/notes/cover.htt)

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- 1. G. Gupta and E. Pontelli "Last Alternative Optimization for Or-parallel Logic Programming Systems", in *Parallelism and Implementation Technology for Constraint Logic Programming*, Nova Science, 1999.
- 2. G. Gupta and E. Pontelli "Specification, Implementation, and Verification of Domain Specific Languages: a Logic Programming-based Approach", In *Computational Logic: from Logic Programming into the Future*, (invited contribution), Springer Verlag, 2002.
- 3. E. Pontelli, A. Karshmer, G. Gupta. "Mathematics and Accessibility: a Survey", In *The Universal Access Handbook*, Lawrence Erlbaum, 2009.
- 4. E. Pontelli, T.C. Son, C. Baral. "A Logic Programming Based Framework for Intelligent Web Services Composition", In *Managing Web Services Quality: Measuring Outcomes and Effctiveness*, IDEA Group Publishing, 2008.
- 5. Y. Pan, E. Pontelli, S. Tran. "BSIS: An Experiment in Automating Bioinformatics Tasks Through Intelligent Workflow Construction", In *Semantic e-Science*, Springer Verlag, pp. 189–238, 2010.
- 6. F. Prosdocimi, B. Chisham, E. Pontelli, A. Stoltzfus, J. Thompson. "Knowledge standardization in evolutionary biology: the comparative data analysis ontology", In *Evolutionary Biology: Concept, Modeling, and Application*, Springer, Chapter 12, 2009.
- 7. E. Pontelli, T. Son, H. Nguyen. "Combining Answer Set Programming and Prolog: The ASP-Prolog System", In *Logic Programming, Knowledge Representation, Non-Monotonic Reasoning*, Springer Verlag, 2011.
- 8. A. Dovier, A. Formisano, E. Pontelli. "Perspectives on Logic-Based Approaches for Reasoning about Actions and Change", In *Logic Programming, Knowledge Representation, Non-Monotonic Reasoning*, Springer Verlag, 2011.
- 9. E. Pontelli, T. Son, C. Baral, G. Gelfond. "Planning in the Logic of Knowledge using Answer Set Programming", In *Correct Reasoning*, Springer Verlag, 2012.
- 10. A. Dal Palu, A. Dovier, F. Fioretto, E. Pontelli. "Protein Structure Prediction and Analysis with Constraint Logic Programming", In *Computational Approaches to Nuclear Receptors: From Computational Simulation to In Vivo Experiments*, The Royal Society of Chemistry, 2012.

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- 12. C. Baral, T. Son, E. Pontelli. "A Non-Monotonic Goal Specification Language for Planning with Preferences," Festschrift for Gerd Brewka, Springer Verlag, 2015.
- 13. A. Dovier, A. Formisano, E. Pontelli. "Parallel Answer Set Programming." Handbook of Parallel Constraint Reasoning, pp. 237-282, 2018.

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- 1. G. Gupta and E. Pontelli. "ACE: A High Performance Parallel Prolog System," Proceedings of Joint Conference on Declarative Programming. June 1997, pp. 25-31.
- 2. V. Santos Costa, I. Dutra, G. Gupta, E. Pontelli, et al. "Towards Effective Parallel Logic Programming", Proceedings of the 2001 CNPq Workshop, Brasil, 2001.
- 3. E. Pontelli. "Answer Set Programming in 2010", Proceedings of the Symposium on Practical Aspects of Declarative Languages, Springer Verlag, pp. 1–3, 2010.

Peer-Reviewed International Conferences

- 1. F. Fabiano, A. Burigana, A. Dovier, E. Pontelli, T. Son. "Multi-Agent Epistemic Planning with Inconsistent Beliefs, Trust and Lies," Pacific-Rim International Conference on Artificial Intelligence (PRICAI), 2021.
- 2. L. Pham, T. Son, E. Pontelli. "Formalizing the Three-Player Card Game Using the Language maA*," 19th International Workshop on Non-Monotonic Reasoning, 2021.
- 3. M. Porag Chowdhury, J. Perez, C. Kiekintveld, T. Son, W. Yeoh, E. Pontelli. "Empirical game-theoretic methods to minimize regret against specific opponents," Proceedings Volume 11746, Artificial Intelligence and Machine Learning for Multi-Domain Operations Applications III, SPIE, 2021.
- 4. L.L. Trieu, T. Son, E. Pontelli, M. Balduccini. "Generating explanations for answer set programming applications," Proceedings Volume 11746, Artificial Intelligence and Machine Learning for Multi-Domain Operations Applications III, SPIE, 2021.
- 5. Fabio Tardivo, Loc Pham, Tran Cao Son, Enrico Pontelli. "A Logic Programming Approach to Regression Based Repair of Incorrect Initial Belief States." International Symposium on Practical Aspects of Declarative Languages, Springer Verlag, pp. 73-89, 2021.
- Francesco Fabiano, Alessandro Burigana, Agostino Dovier, Enrico Pontelli. "EFP 2.0: A Multi-Agent Epistemic Solver with Multiple E-State Representations." International Conference on Automated Planning and Scheduling, AAAI Press, pp. 101-109, 2020.

- 7. Emmanuel Utreras, Enrico Pontelli. "Design of a Tangible Programming Tool for Students with Visual Impairments and Low Vision." Universal Access in Human-Computer Interaction, Springer Verlag, pp. 304-314, 2020.
- 8. Emmanuel Utreras, Enrico Pontelli. "Accessibility of Block-Based Introductory Programming Languages and a Tangible Programming Tool Prototype." International Conference on Computers Helping People (ICCHP), Springer Verlag, pp. 27-34, 2020.
- 9. Marcello Balduccini, Michael Gelfond, Enrico Pontelli, Tran Cao Son. "An Answer Set Programming Framework for Reasoning about Agents' Beliefs and Truthfulness of Statements." International Conference on Principles of Knowledge Representation and Reasoning, pp. 69-78, 2020.
- 10. T. Nguyen, E. Pontelli, T. Son. "On Repairing Web Services Workflows," International Symposium on Practical Aspects of Declarative Languages, Springer Verlag, pp. 37-53, 2020.
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Other Educational Activities

• Faculty Advisor, NMSU Chapter of Women in Computing, 2011-present.

- Faculty Advisor, NMSU Computer Science Graduate Students Organization, 2004-2008.
- Faculty Advisor, NMSU Graduate Council, 2004.
- Faculty Advisor, NMSU Circle K Club (2000 and 2001).
- Faculty Mentor, NMSU Bridges Program for Native American students, Summer 2001.
- Faculty Mentor, NMSU Bridges Program for Native American students, Summer 2002.
- Judge, NMSU Graduate Research and Arts Symposium, 2001.
- Judge and Moderator, NMSU Graduate Research and Arts Symposium, 2002.