

# CURRICULUM VITAE : Joohyung Lee

**Homepage** <http://peace.eas.asu.edu/joolee>  
**Email** [joolee@asu.edu](mailto:joolee@asu.edu)  
**Work Address** School of Computing, Informatics, and Decision Systems Engineering,  
Fulton Schools of Engineering, Arizona State University, AZ, USA

## POSITION

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Associate Professor School of Computing, Informatics, and Decision Systems Engineering,  
Fulton Schools of Engineering, Arizona State University

## EDUCATION

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**Ph.D.** in Computer Science, University of Texas at Austin, TX, USA  
**B.S.** in Computer Engineering, Seoul National University, South Korea

## RESEARCH INTERESTS

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knowledge representation, logic programming, commonsense reasoning, nonmonotonic reasoning, computational logics, security.

## AWARDS / RECOGNITIONS

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- **Overseas Study Scholarship**, The Korea Foundation for Advanced Studies, 1998–2003.
- **Outstanding Paper Honorable Mention Award**, AAAI 2004.
- Three of my advisees received the best student awards from the school (2010, 2012, 2013) for their academic excellence.

## Publications

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(Authors are listed alphabetically. My student names are underlined. All papers are available electronically at <http://peace.eas.asu.edu/joolee/papers.>)

## PAPERS IN REFEREED CONFERENCES<sup>1</sup>

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1. Joseph Babb and Joohyung Lee. Cplus2ASP: Computing Action Language C+ in Answer Set Programming. In *Proceedings of the 12th International Conference on Logic Programming and Non-monotonic Reasoning (LPNMR 2013)*, 122–134, 2013.
2. Joohyung Lee and Yunsong Meng. Answer Set Programming Modulo Theories and Reasoning about Continuous Changes. In *Proceedings of the 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)*, 2013. (acceptance rate: 28% (413/1473))

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<sup>1</sup>IJCAI, AAAI, KR, and COMPSAC papers are in two column format.

3. Michael Bartholomew and Joohyung Lee. Functional Stable Model Semantics and Answer Set Programming Modulo Theories. In *Proceedings of the 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)*, 2013. (acceptance rate: 28% (413/1473))
4. Joohyung Lee, Vladimir Lifschitz, and Fangkai Yang. Action Language BC: Preliminary Report In *Proceedings of the 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)*, 2013. (acceptance rate: 28% (413/1473))
5. Topi Pulkkinen, Young-Sung Son, Joohyung Lee, Yann-Hang Lee, Mikko Sallinen and Jun-Hee Park. Progressive Monitoring and Treatment Planning of Diabetes Mellitus in Smart Home Environment. *The International Conference on Consumer Electronics (ICCE)* 2013.
6. Joohyung Lee and Ravi Palla. Reformulating Temporal Action Logics in Answer Set Programming. In *Proceedings of the 26th AAAI Conference on Artificial Intelligence (AAAI 2012)*, pages 786–792, 2012. (acceptance rate: 26% (294/1129))
7. Michael Bartholomew and Joohyung Lee. Stable Models of Formulas with Intensional Functions. In *Proceedings of the 13th International Conference on Principles of Knowledge Representation and Reasoning (KR 2012)*, pages 2-12, 2012. (acceptance rate: 26% (53/202))
8. Joohyung Lee and Yunsong Meng. Stable Models of Formulas with Generalized Quantifiers. In *Technical Communications of the 28th International Conference on Logic Programming (ICLP 2012)*, pages 61–71, 2012.
9. Michael Bartholomew, Joohyung Lee, and Yunsong Meng. First-Order Extension of the FLP Stable Model Semantics via Modified Circumscription. In *Proceedings of the 22nd International Joint Conference on Artificial Intelligence (IJCAI 2011)*, pages 724–730, 2011. (accepted as both oral and poster; acceptance rate: 17% (227/1325))
10. Michael Casolary and Joohyung Lee. Representing the Language of the Causal Calculator in Answer Set Programming. Michael Casolary and Joohyung Lee. In *Technical Communications of the 27th International Conference on Logic Programming (ICLP 2011)*, LIPICS 11:51–61, 2011.
11. Joohyung Lee and Ravi Palla. Integrating Rules and Ontologies in the First-Order Stable Model Semantics (Preliminary Report). In *Proceedings of the 11th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2011)*, pages 248–253, 2011.
12. Joohyung Lee and Ravi Palla. Situation Calculus as Answer Set Programming. In *Proceedings of the 24th AAAI Conference on Artificial Intelligence (AAAI 2010)*, pages 309–314, 2010. (acceptance rate: 26.9% (264/982))
13. Michael Bartholomew and Joohyung Lee. A Decidable Class of Groundable Formulas in the General Theory of Stable Models. In *Proceedings of the 12th International Conference on Principles of Knowledge Representation and Reasoning (KR 2010)*, pages 477–485, 2010. (acceptance rate: 25.1% (53/211))
14. Gail-Joon Ahn, Hongxin Hu, Joohyung Lee, and Yunsong Meng. Representing and Reasoning about Web Access Control Policies. In *Proceedings of the 34th Annual IEEE Computer Software and Applications Conference (COMPSAC 2010)*, pages 137–146, 2010. (acceptance rate: 20% (39/193))
15. Tae-Won Kim, Joohyung Lee, and Ravi Palla. Circumscriptive Event Calculus as Answer Set Programming. In *Proceedings of the 21st International Joint Conference on Artificial Intelligence (IJCAI 2009)*, pages 823–829, 2009. (acceptance rate: 25.7% (331/1290))

16. Paolo Ferraris, Joohyung Lee, Vladimir Lifschitz, and Ravi Palla. Symmetric Splitting in the General Theory of Stable Models. In *Proceedings of the 21st International Joint Conference on Artificial Intelligence (IJCAI 2009)*, pages 797–803, 2009. (acceptance rate: 25.7% (331/1290))
17. Joohyung Lee and Yunsong Meng. On Reductive Semantics of Aggregates in Answer Set Programming. In *Proceedings of the 10th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2009)*, pages 182–195, 2009.
18. Joohyung Lee and Ravi Palla. System F2LP - Computing Answer Sets of First-Order Formulas. In *Proceedings of the 10th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2009)*, pages 515–521, 2009.
19. Joohyung Lee, Vladimir Lifschitz and Ravi Palla. A Reductive Semantics for Counting and Choice in Answer Set Programming. In *Proceedings of the 23rd AAAI Conference on Artificial Intelligence (AAAI 2008)*, pages 472–479, 2008. (acceptance rate: 24.2% (227/937))
20. Joohyung Lee and Yunsong Meng. On Loop Formulas with Variables. In *Proceedings of the 11th International Conference on Principles of Knowledge Representation and Reasoning (KR 2008)*, pages 444–453, 2008. (acceptance rate: 27.5% (69/251))
21. Joohyung Lee, Vladimir Lifschitz and Ravi Palla. Safe Formulas in the General Theory of Stable Models (Preliminary Report). In *Proceedings of the 19th International Conference on Logic Programming (ICLP 2008)*, pages 672–676, 2008. (acceptance rate: 35.6% (63/177))
22. Paolo Ferraris, Joohyung Lee and Vladimir Lifschitz. A New Perspective on Stable Models. In *Proceedings of the 20th International Joint Conference on Artificial Intelligence (IJCAI 2007)*, pages 372–379, 2007. (acceptance rate: 15.7% (212/1353))
23. Martin Gebser, Joohyung Lee and Yuliya Lierler. Head-Elementary-Set-Free Logic Programs. In *Proceedings of the 9th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2007)*, pages 149–161, 2007.
24. Martin Gebser, Joohyung Lee and Yuliya Lierler. Elementary Sets for Logic Programs. In *Proceedings of the 21st AAAI Conference on Artificial Intelligence (AAAI 2006)*, pages 244–249, 2006. (acceptance rate: 22% (171/774))
25. Joohyung Lee. A Model Theoretic Counterpart of Loop Formulas. In *Proceedings of the 19th International Joint Conference on Artificial Intelligence (IJCAI 2005)*, pages 503–508, 2005. (acceptance rate: 18% (240/1329))
26. Joohyung Lee and Fangzhen Lin. Loop Formulas for Circumscription. In *Proceedings of the 19th AAAI Conference on Artificial Intelligence (AAAI 2004)*, pages 281–286, 2004. (acceptance rate: 26.7% (121/453))  
**Received Outstanding Paper Honorable Mention Award.**
27. Joohyung Lee. Nondefinite vs. Definite Causal Theories. In *Proceedings of the 7th International Conference on Logic Programming and Non-Monotonic Reasoning (LPNMR 2004)*, pages 141–153, 2004.
28. Joohyung Lee and Vladimir Lifschitz. Describing Additive Fluents in Action Language *C+*. In *Proceedings of the 18th International Joint Conference on Artificial Intelligence (IJCAI 2003)*, pages 1079–1084, 2003. (acceptance rate: 20.7% (189/913))

29. Joohyung Lee and Vladimir Lifschitz. Loop Formulas for Disjunctive Logic Programs. In *Proceedings of the 19th International Conference on Logic Programming (ICLP 2003)*, pages 451–465, 2003. (acceptance rate: 28.4% (23/81)) runner-up for Test of Time Award at ICLP 2013.

## PAPERS IN REFEREED JOURNALS

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1. Michael Bartholomew and Joohyung Lee. On the Stable Model Semantics for Intensional Functions. *Journal of Theory and Practice of Logic Programming (TPLP)*, 13(4–5), 2013.
2. Joohyung Lee and Ravi Palla. Reformulating the Situation Calculus and the Event Calculus in the General Theory of Stable Models and in Answer Set Programming. *Journal of Artificial Intelligence Research (JAIR)*, 43:571–620, 2012.
3. Joseph Babb and Joohyung Lee. Module Theorem for the General Theory of Stable Models. *Journal of Theory and Practice of Logic Programming (TPLP)*, 12(4–5):719–735, 2012.
4. Paolo Ferraris, Joohyung Lee, Yuliya Lierler, Vladimir Lifschitz, and Fangkai Yang. Representing First-Order Causal Theories by Logic Programs. *Journal of Theory and Practice of Logic Programming (TPLP)*, 12(3) 383–412, 2012.
5. Joohyung Lee and Yunsong Meng. First-Order Stable Model Semantics and First-Order Loop Formulas. *Journal of Artificial Intelligence Research (JAIR)*, 42:125–180, 2011.
6. Martin Gebser, Joohyung Lee, and Yuliya Lierler. On Elementary Loops of Logic Programs. *Journal of Theory and Practice of Logic Programming (TPLP)*, 11(6), pp 953–988, 2011.
7. Paolo Ferraris, Joohyung Lee, and Vladimir Lifschitz. Stable Models and Circumscription. *Artificial Intelligence*, 175(1):236–263, 2011.
8. Joohyung Lee and Fangzhen Lin. Loop Formulas for Circumscription. *Artificial Intelligence*, 170(2):160–185, 2006.
9. Paolo Ferraris, Joohyung Lee, and Vladimir Lifschitz. A Generalization of the Lin-Zhao Theorem. *Annals of Mathematics and Artificial Intelligence*, 47:79–101, 2006.
10. Enrico Giunchiglia, Joohyung Lee, Vladimir Lifschitz, Norman McCain, and Hudson Turner. Nonmonotonic Causal Theories. *Artificial Intelligence*, 153:49–104, 2004.
11. Varol Akman, Selim T. Erdoğan, Joohyung Lee, Vladimir Lifschitz, and Hudson Turner. Representing the Zoo World and the Traffic World in the Language of the Causal Calculator. *Artificial Intelligence*, 153:105–140, 2004.

## PAPERS IN REFEREED WORKSHOPS

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1. Michael Bartholomew and Joohyung Lee. A Functional View of Strong Negation. In *Working Notes of the 6th Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP 2013)*.
2. Joohyung Lee and Yunsong Meng. Two New Definitions of Stable Models of Logic Programs with Generalized Quantifiers. In *Working Notes of the 5th Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP 2012)*.

3. Joohyung Lee and Yunsong Meng. Stable Models of Formulas with Generalized Quantifiers. In *Proceedings of the 14th International Workshop on Nonmonotonic Reasoning (NMR 2012)*.
4. Michael Bartholomew, Joohyung Lee, and Yunsong Meng. First-Order Extension of the FLP Semantics. In *Working Notes of Common Sense 2011: 10th Symposium on Logical Formalizations of Commonsense Reasoning*.
5. Joohyung Lee and Ravi Palla. Integrating Rules and Ontologies in the First-Order Stable Model Semantics (Preliminary Report). In *Working Notes of Common Sense 2011: 10th Symposium on Logical Formalizations of Commonsense Reasoning*.
6. Joohyung Lee, Yuliya Lierler, Vladimir Lifschitz, and Fangkai Yang. Representing Synonymity in Causal Logic and in Logic Programming. In *Proceedings of the 13th International Workshop on Nonmonotonic Reasoning (NMR 2010)*.
7. Gail-Joon Ahn, Hongxin Hu, Joohyung Lee, and Yunsong Meng. Reasoning about XACML Policy Descriptions in Answer Set Programming (Preliminary Report). In *Proceedings of the 13th International Workshop on Nonmonotonic Reasoning (NMR 2010)*.
8. Joohyung Lee and Ravi Palla. Classical Logic Event Calculus as Answer Set Programming. In *Working Notes of Answer Set Programming and Other Computing Paradigms (ASPOCP 2008)*, pages 119-133, 2008.
9. Joohyung Lee and Ravi Palla. Yet Another Proof of the Strong Equivalence between Propositional Theories and Logic Programs. In *Proceedings of the Correspondence and Equivalence for Nonmonotonic Theories (CENT 2007)*, pages 1–12, 2007. (CEUR Vol 265).
10. Martin Gebser, Joohyung Lee and Yuliya Lierler. Elementary Sets for Logic Programs. In *Working Notes of 11th International Workshop on Nonmonotonic Reasoning (NMR 2006)*.
11. Joohyung Lee and Vladimir Lifschitz. A Knowledge Module: Buying and Selling. In *Working Notes of AAAI Spring Symposium on Formalizing and Compiling Background Knowledge and Its Applications to Knowledge Representation*, 2006.
12. Joohyung Lee and Vladimir Lifschitz. Additive Fluents. In *Working Notes of AAAI Spring Symposium on Answer Set Programming*, pages 116–123, 2001. **(Selected as one of the four long presentations among 29 presentations)**
13. Joohyung Lee, Vladimir Lifschitz, and Hudson Turner. A Representation of the Zoo World in the Language of the Causal Calculator. In *Working Notes of Common Sense 2001: 5th Symposium on Logical Formalizations of Commonsense Reasoning*, pages 174–185, 2001.
14. Varol Akman, Selim T. Erdoğan, Joohyung Lee, and Vladimir Lifschitz. A Representation of the Traffic World in the Language of the Causal Calculator. In *Working Notes of Common Sense 2001: 5th Symposium on Logical Formalizations of Commonsense Reasoning*, pages 1–10, 2001.
15. Enrico Giunchiglia, Joohyung Lee, Vladimir Lifschitz, and Hudson Turner. Causal Laws and Multi-valued Fluents. In *Working Notes of 4th Workshop on Nonmonotonic Reasoning, Action and Change (NRAC 2001)*, 2001.

## BOOKS / BOOK CHAPTERS

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- Esra Erdem, Joohyung Lee, Yuliya Lierler, and David Pearce (Editors). *Correct Reasoning: Essays on Logic-Based AI in Honor of Vladimir Lifschitz*. Springer LNCS Vol 7265, 2012.
- Joohyung Lee. *Reformulating Action Language  $\mathcal{C}+$  in Answer Set Programming*. In *Correct Reasoning: Essays on Logic-Based AI in Honor of Vladimir Lifschitz*. Springer LNCS Vol 7265, 2012.

## EDITED PROCEEDINGS

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- Wolfgang Faber and Joohyung Lee. *Workshop Proceedings of 2nd International Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP 2009)*, 2009.
- Wolfgang Faber and Joohyung Lee. *Workshop Proceedings of 1st International Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP 2008)*, 2008.

## INVITED TALKS (Not including conference/workshop presentations)

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1. **Automated Reasoning about Actions**. Translational Genomics Research Institute (TGEN), Phoenix, AZ, 2003.
2. **Loop Formulas for Disjunctive Logic Programs**. Texas Action Group Meeting, Las Cruces, New Mexico, 2003.
3. **Loop Formulas for Nonmonotonic Logics**. Hong Kong University of Science and Technology, Hong Kong, 2003.
4. **A Model-Theoretic Counterpart of Loop Formulas**. Dagstuhl Seminar on Nonmonotonic Reasoning, Answer Set Programming and Constraints, Germany, 2005.
5. **Answer Set Programming**. KOCSEA technical symposium, Phoenix, Arizona, 2006.
6. **AQUAINT Phase 3 Kick-off Meeting**. Santa Fe, NM, Oct 2006.
7. **InfoX PI Meeting**. Dallas, TX, Mar 2007.
8. **AQUAINT 6 month PI Meeting**. Washington DC, May 2007.
9. **AQUAINT 12 month PI Meeting**. San Antonio, TX, Oct 2007.
10. **Action Language  $\mathcal{C}+$** , US Korea Conference on Science, Technology, and Entrepreneurship (UKC), San Diego, CA, 2008.
11. **Circumscriptive Event Calculus as Answer Set Programming**, Forum for Artificial Intelligence, University of Texas at Austin, Apr 3, 2009.
12. **On Reductive Semantics of Aggregates in Answer Set Programming**, ISL seminar, University of Western Sydney, May, 2009.
13. **A Reformulation of Circumscriptive Event Calculus as Answer Set Programming**, IIS/ICT seminar, Griffith University, June, 2009.

14. **Answer Set Programming — An Effective Way to Talk to Computers**, Chung-Ang University, June, 2009.
15. **Answer Set Programming — An Effective Way to Talk to Computers**, POSTECH, June, 2009.
16. **Answer Set Programming — An Effective Way to Talk to Computers**, KAIST, June, 2009.
17. **Assertion Defense**, IARPA SCIL Joint PI Meeting, Washington DC, March, 2010.
18. **Elaboration Tolerance and Action Language  $\mathcal{C}^+$** , KAIST (formerly the Korea Advanced Institute of Science and Technology), South Korea, March 2012.
19. **Integrating Rules and Ontologies for the Home Information Remote Aggregation and Context Inference Prediction Technology**, Electronics and Telecommunications Research Institute, South Korea, March 2012.
20. **Theory and Practice of Answer Set Programming**, AAAI 2012 Tutorial, July 2012.  
Tutorial homepage: <http://peace.eas.asu.edu/aaai12tutorial>.
21. **High Level Context Reasoning via Answer Set Programming**, Expert Seminar, Electronics and Telecommunications Research Institute, South Korea, July 2013.
22. **Functional Stable Model Semantics, Answer Set Programming Modulo Theories, and Action Languages**, Keynote address, International Workshop on Nonmonotonic Reasoning, Action and Change (NRAC 2013), August 2013.

## SOFTWARE DEVELOPMENT

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1. **Causal Calculator (CCALC) Version 2** (<http://www.cs.utexas.edu/users/tag/ccalc>): A system for automated commonsense reasoning about actions.
2. **System F2LP** (<http://reasoning.eas.asu.edu/f2lp>): An implementation of the stable model semantics for first-order formulas. Can be used to compute the situation calculus and the event calculus.
3. **System ECASP** (<http://reasoning.eas.asu.edu/ecasp>): An implementation of the event calculus as answer set programming. Listed in Wikipedia under the section “Event calculus”.
4. XACML2ASP: an implementation of XACML in answer set programming.
5. CPLUS2ASP (<http://reasoning.eas.asu.edu/cplus2asp>): an implementation of action language  $\mathcal{C}^+$  in answer set programming.

## RESEARCH GRANTS

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1. **DTO AQUAINT** Contract no: N61339-06-C-0123. Title: *Compiling AnsProlog to First-Order Theories — An Approach to Integrate AnsProlog Knowledge Bases with First-Order Knowledge Bases*. Sponsor: DOD-Navy. Amount: \$106,736. Period: 9/30/2006 – 9/29/2007. PI: Chitta Baral, co-PI: Joohyung Lee (90%).
2. **NSF** Grant number: IIS-0839821. Title: *SGER: Grounding-independent Reasoning in Answer Set Programming*. Amount: \$80,000. Period: 9/1/2008 – 8/31/2009. PI (100%).

3. **NSF** Grant number: IIS-0916116. Title: *Enhancing Nonmonotonic Declarative Knowledge Representation and Reasoning by Merging Answer Set Programming with Other Computing Paradigms*. Amount: \$275,000. Period: 9/1/2009 – 8/31/2012. PI (100%).
4. **NSF** Grant number: IIS-1036509. Title: *REU: Enhancing Nonmonotonic Declarative Knowledge Representation and Reasoning by Merging Answer Set Programming with Other Computing Paradigms*. Amount: \$15,668. Period: 9/1/2010 – 8/31/2011. PI (100%).
5. **IARPA SCIL** Title: *Integrating Machine Learning and Knowledge Representation for Discovery of Social Goals of Groups and Group Members from Their Language Usage*. Amount: \$1,420,160. Period: 8/24/2009-10/23/2012. co-PI (20%).
6. **Siemens Corporate Research** Title: *Reasoning about Causes with Preferences and Uncertainty in Dynamic Biomedical Domains*. Amount: \$24,045. PI (100%).
7. **Electronics and Telecommunications Research Institute (ETRI)** Title: *Home Information Remote Aggregation and Context Inference Prediction Technology Development*, Amount: \$219,512. Period: 10/1/2010-9/30/2013. co-PI (50%).
8. **NSF** Grant number: IIS-1319794. Title: *Answer Set Programming Modulo Theories*. Amount: \$315,000. Period: 8/15/2013 – 7/31/2016. PI (100%).

## STUDENT ADVISING

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### Graduate:

- Ravi Palla (Ph.D., 2012). Thesis title: *Bridging the Gap between Classical Logic Based Formalisms and Logic Programs*. First employment: research scientist at Siemens Corporate Research (SCR) in New Jersey. Recipient of the Outstanding Computer Science Ph.D. student award in 2012,
- Yunsong Meng (Ph.D., 2013). Thesis title: *Answer Set Programming and Other Computing Paradigms*. First employment: research scientist at Samsung Information Systems America (SISA) R&D Center.
- Tae-Won Kim (MS, 2009). Thesis title: *Experimenting with Answer set Programming Based Event Calculus Reasoner*. Current employment: Iris ID Systems in New Jersey.
- Michael Casolary (MS, 2011). Thesis Title: *Representing the Language of the Causal Calculator in Answer Set Programming*. First employment: Celestech in Phoenix.
- Sunjin Kim (MCS, 2011). Worked on SCIL IARPA project. First employment: Samsung.
- Yu Zhang (MCS, 2013). Worked on HiConcept project. First employment: Intel.

### Current:

- Michael Bartholomew (Ph.D. student). Dean's Scholarship recipient. CS Distinguished Senior Award (2010)
- Yi Wang (Ph.D. student)
- Joseph Babb (MS student). SMART scholarship recipient. CSE Outstanding Graduating Student Award in 2013. Supported by NSF REU and FURI.
- Chao Zhang (Ph.D. student)
- Eric Van Egmond (MS student)



- **Organizer**

- 29th International Conference on Logic Programming (ICLP 2013). General Co-Chair
- 27th International Conference on Logic Programming (ICLP 2011). Workshop Chair
- 2nd Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP 2009) (<http://www.mat.unical.it/ASPOCP09/>)
- 1st Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP 2008) (<http://www.mat.unical.it/ASPOCP08/>)
- AAAI 2006 Spring Symposium on Formalizing and Compiling Background Knowledge and Its Applications to Knowledge Representation and Question Answering

- **Program Committee**

- 2014
  - \* 14th International Conference on the Principles of Knowledge Representation and Reasoning (KR 2014)
  - \* 15th International Workshop on Nonmonotonic Reasoning (NMR 2014)
  - \* 8th International Conference on Web Reasoning and Rule Systems (RR 2014)
  - \* 28th AAAI Conference on Artificial Intelligence (AAAI 2014)
  - \* 21st European Conference on Artificial Intelligence (ECAI 2014)
  - \* 16th International Symposium on Practical Aspects of Declarative Languages (PADL 2014)
  - \* 16th International Conference on Artificial Intelligence: Methodology, Systems, Applications (AIMSA 2014)
- 2013
  - \* 29th International Conference on Logic Programming (ICLP 2013)
  - \* 12th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2013)
  - \* 7th International Conference on Web Reasoning and Rule Systems (RR 2013)
  - \* 10th International Workshop on Nonmonotonic Reasoning, Action and Change (NRAC 2013)
  - \* 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)
  - \* 6th International Workshop on Answer Set Programming and Other Computing (ASPOCP 2013)
  - \* 1st International Workshop on Knowledge Representation and Reasoning in Robotics (KRR 2013)
  - \* 2nd International Workshop on Grounding and Transformations for Theories with Variables (GTTV 2013)
- 2012
  - \* 13th International Conference on the Principles of Knowledge Representation and Reasoning (KR 2012)
  - \* KR 2012 Doctoral Consortium (KR-DC 2012): Mentor for Stef De Pooter (K.U. Leuven, Belgium)

- \* 26th AAAI Conference on Artificial Intelligence (AAAI 2012)
- \* 28th International Conference on Logic Programming (ICLP 2012)
- \* Spatio-Temporal Dynamics (STeDy 2012) as part of ECAI 2012
- \* 5th International Workshop on Answer Set Programming and Other Computing (AS-POCP 2012)
- 2011
  - \* 22nd International Joint Conference on Artificial Intelligence (IJCAI 2011): Senior PC
  - \* 10th International Symposium on Logical formalizations of Commonsense Reasoning (Commonsense 2011) as part of AAAI Spring Symposium 2011.
  - \* 11th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2011)
  - \* 27th International Conference on Logic Programming (ICLP 2011)
  - \* 4th International Workshop on Answer Set Programming and Other Computing (AS-POCP 2011)
- 2010
  - \* 3rd International Workshop on Answer Set Programming and Other Computing (AS-POCP 2010)
  - \* 24th AAAI Conference on Artificial Intelligence (AAAI 2010)
  - \* 12th European Conference on Logics in Artificial Intelligence (JELIA 2010)
  - \* 12th International Conference on the Principles of Knowledge Representation and Reasoning (KR 2010)
  - \* KR 2010 Doctoral Consortium (KR-DC 2010)
  - \* 13th International Workshop on Nonmonotonic Reasoning (NMR 2010): Action and Belief Change (ABC)
  - \* 13th International Workshop on Nonmonotonic Reasoning (NMR 2010): Declarative Programming for NMR (DPNMR)
  - \* Nonmonotonic Reasoning at 30 (2010)
- 2009
  - \* 21st International Joint Conference on Artificial Intelligence (IJCAI 2009)
  - \* 10th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2009)
  - \* 9th International Symposium on Logical formalizations of Commonsense Reasoning (Commonsense 2009)
- 2008
  - \* 23rd AAAI Conference on Artificial Intelligence (AAAI 2008)
  - \* 12th International Workshop on Nonmonotonic Reasoning (NMR 2008)
- until 2007
  - \* 8th International Symposium on Logical formalizations of Commonsense Reasoning (Commonsense 2007)
  - \* 11th International Workshop on Nonmonotonic Reasoning (NMR 2006)
  - \* 19th International Joint Conference on Artificial Intelligence (IJCAI 2005)
  - \* Latin American Workshop on Non-Monotonic Reasoning (LANMR 2004)

- **Session Chair**

AAAI 2010, NMR 2010, LPNMR 2009, ASPOCP 2009, AAAI 2008, ASPOCP 2008

- **Reviewer**

**Journals** Artificial Intelligence (*AIJ*), Theory and Practice of Logic Programming (*TPLP*), ACM Transactions on Computational Logic (*TOCL*), Decision Support Systems and Electronic Commerce (*DSS*), Annals of Mathematics and Artificial Intelligence (*AMAI*), Journal of Artificial Intelligence Research (*JAIR*), AI Communications.

**Conferences** Sixth International Conference on Logic Programming and Non-Monotonic Reasoning (*LPNMR 2001*), Sixth Symposium on Logical Formalizations of Commonsense Reasoning (*CS 2003*), Ninth International Conference on the Principles of Knowledge Representation and Reasoning (*KR 2004*), Sixteenth European Summer School of Logic Language and Information (*ESSLLI 2004*) Student Session, Nineteenth International Joint Conference on Artificial Intelligence (*IJCAI-05*), Twentieth AAAI Conference on Artificial Intelligence (*AAAI-05*), Eighth International Conference on Logic Programming and Non-Nonotonic Reasoning (*LPNMR-05*), 11th International Conference on the Principles of Knowledge Representation and Reasoning (*KR-08*). 25th International Conference on Logic Programming (*ICLP 2009*).

**Books** Handbook of Knowledge Representation.

- **Secretary** Korean Computer Scientists and Engineers Association in America, 2006-2007.
- **Local Chair** KOCSEA Technical Symposium, 2006.

### Internal Services (ASU):

- **Ph.D. Thesis Committee** Ravi Palla (chair), Yunsong Meng (chair), Jicheng Zhao (member), Tuan A. Nguyen (member), Juraj Dzifcak (member), Saadat Anwar (member), Young Wn Song (member).
- **Master Thesis Committee** Matt Hunsaker (member), Seungchul Jung (member), Tae-Won Kim (chair), Michael Casolary (chair), Rohit Raghunathan (member), Barry Lumpkin (member), Hengyi Yang (member), Jeong-Jin Seo (member).
- **Undergraduate Honors Thesis Committee** Mike Bartholomew (chair), Alex Wallace (member), Patrick Kreckler (member).
- **CS Graduate Admission Committee** 2012–.
- **ABET Committee** 2008–.
- **TA Committee** 2007–2008.
- **Computing Resources Committee** 2006–2007.
- **Undergraduate Admission Committee** 2005–2006.