

Kartik Talamadupula

Department of Computer Science
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Education

Ph.D. Computer Science, Arizona State University, May 2013 (Expected).

B.S. Computer Science (*Summa cum Laude*), Arizona State University, Dec 2007.

Research Experience

Graduate Research Assistant
Subbarao Kambhampati

2008–Present
Arizona State University

Working on devising efficient planning algorithms to enable planning with incomplete domain theories and models. Other projects include extending representational capacities to engineer a planner into guiding a robot in a real-world rescue scenario; finding a suitably informed heuristic for temporal planning in order to extend temporally expressive representations.

Undergraduate Research Scholar
Subbarao Kambhampati

2007–2008
Arizona State University

Analyzed temporal planning benchmark domains used in previous editions of the International Planning Competition (IPC) in order to prove their actions' lack of expressivity with respect to requiring concurrency for solution plans to succeed, regardless of the problem at hand. Defined and proved that all of these domains were *inherently sequential*, thus leading to an introduction of such domains for the next edition of the planning competition, along with planners that could solve problems requiring concurrency in their solutions.

Other Employment

Department of Civil & Environmental Engg.
Arizona State University
Webmaster

Tempe, Arizona

2006–2007

Produced and maintained the department website with inputs from all stakeholders; oversaw a migration to a new college-wide template to conform to standards; liaised with University level professionals in order to upgrade website's design and content management.

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Refereed Conferences

Finding and Exploiting Goal Opportunities in Real-time during Plan Execution; Paul Schermerhorn, J. Benton, Matthias Scheutz, Kartik Talamadupula, Subbarao Kambhampati; In the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2009.

Evaluating Temporal Planning Domains; William Cushing, Daniel S. Weld, Mausam, Subbarao Kambhampati, Kartik Talamadupula; In the Proceedings of the Seventeenth International Conference on Automated Planning and Scheduling (ICAPS), 2007.

Workshop Papers

Integrating a Closed World Planner with an Open World Robot: A Case Study; K. Talamadupula, J. Benton, P. Schermerhorn, S. Kambhampati, M. Scheutz; In the ICAPS 2009 Workshop of Bridging the Gap between Task and Motion Planning (BTAMP).

Evaluating Temporal Planning Domains; William Cushing, Daniel S. Weld, Mausam, Subbarao Kambhampati, Kartik Talamadupula; In the ICAPS 2007 Workshop on the International Planning Competition: Past, Present and Future.

Other Publications

Integrating a Closed World Planner and an Open World Robot; K. Talamadupula, J. Benton, P. Schermerhorn, S. Kambhampati, M. Scheutz; In the ICAPS 2009 Doctoral Consortium.

A Heuristic for Soft Deadline Goals; J. Benton, Kartik Talamadupula, Subbarao Kambhampati; In the ICAPS 2008 Doctoral Consortium; Presented by J. Benton.

Service

- Auxillary Reviewer: ICAPS 2009.

Honors and Awards

- Science Foundation Arizona (SFAz) Fellow, 2008-2010.
- Honorable Mention, Computing Research Association (CRA) Outstanding Undergraduate Student Awards 2008.
- Department of Computer Science Distinguished Undergraduate Senior Award, 2008.
- Fulton Undergraduate Research Initiative (FURI) Fellow, 2008.