

Jordan T. Thayer

Department of Computer Science
University of New Hampshire
33 Academic Way, Durham, NH 03824-2619 USA
jtd7@cs.unh.edu, +1-219-680-8104
<http://www.cs.unh.edu/~jtd7>

- Research Interests** Artificial intelligence, heuristic search, automated planning.
- Education**
- UNIVERSITY OF NEW HAMPSHIRE Ph.D. in Computer Science, expected May 2012
Dissertation: *Heuristic Search Under Quality And Time Bounds*.
Advisor: Wheeler Ruml.
- ROSE-HULMAN INSTITUTE OF TECHNOLOGY B.S. in Computer Science, 2006
- Professional Experience**
- UNIVERSITY OF NEW HAMPSHIRE
Research Assistant July 2007 – present
Researcher in heuristic search.
- BEN-GURION UNIVERSITY OF THE NEGEV, ISRAEL
Visiting Researcher November 2011 – December 2011
Worked with Roni Stern and Ariel Felner on Bounded Cost Search, a new problem setting for heuristic search. Resulted in accepted ICAPS-12 paper.
- ALBERT-LUDWIGS-UNIVERSITÄT FREIBURG GERMANY
Visiting Researcher June 2011 – August 2011
Worked with Malte Helmert on integrating my state-of-the-art bounded suboptimal search algorithms into the state-of-the-art Fast Downward planning system. Resulted in submission to AAAI-12.
- ROSE-HULMAN VENTURES
Software Engineer August 2004 – May 2005
Developer for OBTech, a company which made medical transcription software targeted for obstetricians and gynecologists. In charge of synchronization between desktop and PDA version of software, backup and security of patient data.
- Refereed Conference Publications**
- Jordan T. Thayer, Roni Stern, Ariel Felner, Wheeler Ruml, “Faster Bounded-Cost Search Using Inadmissible Estimates,” To appear in *Proceedings of the Twenty-Second International Conference on Automated Planning and Scheduling (ICAPS-12)* 2012.
- Jordan T. Thayer, Wheeler Ruml, “Bounded Suboptimal Search: A Direct Approach Using Inadmissible Estimates,” *Proceedings of the Twenty-Second International Joint Conference on Artificial Intelligence (IJCAI-11)* 2011, pages 674-679. A preliminary version appeared as UNH Technical Report 10-01.
- Jordan T. Thayer, Austin Dionne, Wheeler Ruml, “Learning Inadmissible Heuristics During Search,” *Proceedings of the Nineteenth International Conference on Automated Planning and Scheduling (ICAPS-11)* 2011, pages 250-257. Selected for plenary presentation.
- Silvia Richter, Jordan T. Thayer, Wheeler Ruml, “The Joy of Forgetting: Faster Anytime Search via Restarting,” *Proceedings of the Eighteenth International Conference on Automated Planning and Scheduling (ICAPS-10)* 2010, pages 137-144. Preliminary version appeared in *Proceedings of the Second International Symposium on Combinatorial Search (SoCS-09)*.

Jordan T. Thayer, Wheeler Ruml, “Using Distance Estimates in Heuristic Search,” *Proceedings of the Seventeenth International Conference on Automated Planning and Scheduling (ICAPS-09)* 2009, pages 382-385.

Jordan T. Thayer, Wheeler Ruml, “Faster than Weighted A*: An Optimistic Approach to Bounded Suboptimal Search,” *Proceedings of the Sixteenth International Conference on Automated Planning and Scheduling (ICAPS-08)* 2008, pages 355-362.

Refereed Symposium Publications

Austin Dionne, Jordan T. Thayer, Wheeler Ruml “Deadline-Aware Search Using On-line Measures of Behavior,” *Proceedings of the Fourth International Symposium on Combinatorial Search (SoCS-11)* 2011.

Jordan T. Thayer, Wheeler Ruml “Finding Acceptable Solutions Faster Using Inadmissible Information,” *Proceedings of the Third International Symposium on Combinatorial Search (SoCS-10)* 2010.

Jordan T. Thayer, Wheeler Ruml “Anytime Heuristic Search: Frameworks and Algorithms,” *Proceedings of the Third International Symposium on Combinatorial Search (SoCS-10)* 2010.

Chris Wilt, Jordan T. Thayer, Wheeler Ruml “A Comparison of Greedy Search Algorithms,” *Proceedings of the Third International Symposium on Combinatorial Search (SoCS-10)* 2010.

Jordan T. Thayer, Wheeler Ruml, Jeff Kreis “Using Distance Estimates in Heuristic Search: A Re-evaluation,” *Proceedings of the Second International Symposium on Combinatorial Search (SoCS-09)* 2009.

Jordan T. Thayer, Wheeler Ruml, Ephrat Bitton, “Fast and Loose in Bounded Suboptimal Heuristic Search,” *Proceedings of the First International Symposium on Search Techniques in Artificial Intelligence and Robotics (STAIR-08)*, pp. 120–126, 2008. Also presented at the North East Student Colloquium on Artificial Intelligence, 2008.

Tutorials

“Heuristic Search: The Basics and Beyond”

To be given at the Twenty-sixth Conference on Artificial Intelligence (AAAI-12) in Toronto, Canada with Wheeler Ruml, July 2012

“A Survey Of Suboptimal Search Algorithms”

Given at the Twenty-first International Conference on Planning and Scheduling (ICAPS-11) in Freiburg, Germany with Wheeler Ruml, June 2011

“Using Solution Length Estimates In Heuristic Search”

Given at the Twenty-first International Conference on Planning and Scheduling (ICAPS-11) in Freiburg, Germany with Wheeler Ruml, June 2011

Grants

International Collaboration Supplement 2011

PI: Wheeler Ruml. NSF Robust Intelligence Program, \$18,508.

Wrote initial draft, was heavily involved with editing and submission. Supported research performed in collaboration with Malte Helmert at Albert-Ludwigs-Universität Freiburg.

IJCAI Extended Research Visit 2011

Awarded \$7,500 to visit Malte Helmert at Albert-Ludwigs-Universität Freiburg as part of a program associated with the IJCAI-11 doctoral consortium.

Volunteer for IJCAI-11 2011

Received complimentary registration for volunteering during IJCAI-11.

ICAPS-10 Doctoral Consortium 2010

Received complimentary registration and a travel grant for attending the doctoral consortium associated with ICAPS-10.

IJCAI-09 Doctoral Consortium 2009

Received complimentary registration and a travel grant for attending the doctoral consortium associated with IJCAI-09.

Teaching Experience	UNIVERSITY OF NEW HAMPSHIRE	
	<i>Teaching Assistant</i>	
	Algorithms	Fall 2011
	Introduction to Artificial Intelligence	Spring 2007 – 2010
	Introduction to Computer Science I	Fall 2006
	ROSE-HULMAN INSTITUTE OF TECHNOLOGY	
	<i>Programming Tutor</i>	
	Databases	Fall 2004
	Introduction to Computer Science II	Winter 2003
	Introduction to Computer Science I	Winter 2002
Professional Activities	<i>Organizing</i>	
	Co-organizer, Fifth International Symposium on Combinatorial Search	2012
	Co-organizer, ICAPS workshop on Heuristics and Search for Domain-Independent Planning	2012
	<i>Journal Reviewing</i>	
	Journal of Artificial Intelligence Research	2011
	<i>Conference Reviewing</i>	
	AAAI Conference on Artificial Intelligence	2012
	International Joint Conference on Artificial Intelligence	2011
	Learning and Intelligent Optimization Conference	2011
	Symposium on Combinatorial Search	2011
	<i>Conference Reviewing (Auxiliary Reviewer)</i>	
	International Conference on Autonomous Agents and Multi-Agent Systems	2012
	Learning and Intelligent Optimization Conference	2010, 2012
	International Symposium on Artificial Intelligence and Mathematics	2010
	<i>Membership</i>	
Association for the Advancement of Artificial Intelligence		
University Activities	President of the UNH Student Chapter of the ACM	2007 – 2011
	Member of the Rose-Hulman Interfraternity Council	2004 – 2006
	President of Theta Xi Fraternity	2004 – 2006
	Treasurer of Theta Xi Fraternity	2004
	Secretary of Theta Xi Fraternity	2003
Citizenship	U.S.A.	