

Gavin W. Taylor

Curriculum Vitae

Contact

United States Naval Academy
Department of Computer Science
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Education

Ph.D., Computer Science

Duke University, 2011

Certificate of Excellence in Teaching

Outstanding Departmental Service Award

Preparing Future Faculty Fellowship

Center for Theoretical and Mathematical Sciences Graduate Fellowship

ICML 2010 Student Travel Scholarship

Duke University Graduate School Conference Travel Fellowship

ICML 2009 Student Travel Scholarship

M.S., Computer Science

Duke University, 2009

B.S., Mathematics

Davidson College, 2006

Boyd Calhoun Hipp Scholarship

Robert C. Byrd Honors Scholarship

Mathematical Contest in Modeling: Meritorious Recognition

Bernard Society of Mathematics

Society of Industrial and Applied Mathematics: Member

Publications

Refereed Conference Papers

Marek Petrik, Gavin Taylor, Ronald Parr, and Shlomo Zilberstein. Feature Selection Using Regularization in Approximate Linear Programs for Markov Decision Processes. In *Proceedings of the 27th International Conference on Machine Learning*, Haifa, Israel, 2010.

Gavin Taylor and Ronald Parr. Kernelized Value Function Approximation for Reinforcement Learning. In *Proceedings of the 26th International Conference on Machine Learning*, pages 1017–1024, Montreal, Canada, 2009.

Ronald Parr, Lihong Li, Gavin Taylor, Christopher Painter-Wakefield, and Michael Littman. An Analysis of Linear Models, Linear Value-Function Approximation, and Feature Selection for Reinforcement Learning. In *International Conference of Machine Learning*, pages 752–759, Helsinki, Finland, 2008.

Technical Reports

Marek Petrik, Gavin Taylor, Ronald Parr, and Shlomo Zilberstein. Feature Selection Using Regularization in Approximate Linear Programs for Markov Decision Processes. Technical report, arXiv, <http://arxiv.org/abs/1005.1860>, May 2010.

Abstracts and Workshops

Julian Mason and Gavin Taylor. An Intensive Introductory Robotics Course Without Prerequisites. In *AAAI Robotics Exhibition and Workshop*, July 2010.

Ronald Parr, Gavin Taylor, Christopher Painter-Wakefield, Lihong Li, and Michael Littman. Linear Value Function Approximation and Linear Models. In *Multidisciplinary Symposium on Reinforcement Learning*, June 2009. (abstract).

Ali Nouri, Michael Littman, Lihong Li, Ronald Parr, Christopher Painter-Wakefield, and Gavin Taylor. A Novel Benchmark Methodology and Data Repository for Real-Life Reinforcement Learning. In *Multidisciplinary Symposium on Reinforcement Learning*, June 2009. (abstract).

A. Campbell, L. J. Heyer, M. L. S. Ledbetter, L. L. M. Hoopes, T. T. Eckdahl, A. G. Rosenwald, E. R. Fowlks, N. Dovidio, M. R. Gordon, D. Moskowitz, M. L. Cowell, J. Abele, B. Akin, G. Taylor, D. Choi, P. Karnik, P. Lowry, J. M. Madden, E. E. Oldham, B. Pierce, A. Amore, S. Bossie, M. Citrin, E. Cobain, M. McDonald, M. Solé, E. Wilson, M. g, K. DeCelle, L. Buckwold, B. Whigham, C. A. Zanta, K. Gabric, B. Kittinger, L. Adler, A. Ryan, and W. T. Hatfield. Microarrays for the Masses: Pedagogical Resources for High School through College. In *American Society of Cell Biology*, December 2007. (abstract).

Teaching

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|----------------|--|
| 8/2011–12/2011 | Assistant Professor, two sections of Introduction to Computer Science (IC210)
United States Naval Academy |
| 8/2010–12/2010 | Co-Instructor, Teaching With Robotics (CPS 089S and CPS 196S)
Dr. Jeffrey Forbes
Duke University |
| 5/2009–8/2009 | Instructor, Robotics
Duke Talent Identification Program. |
| 5/2008–8/2008 | Instructor, Robotics
Duke Talent Identification Program. |
| 8/2007–12/2007 | Teaching Assistant, Program Design and Analysis II (CPS 100)
Dr. Jeffrey Forbes
Duke University |
| 1/2007–5/2007 | Teaching Assistant, Program Design and Analysis II (CPS 100 and CPS 100E) |

Dr. Dietolf Ramm
Duke University

Service

1/2011	Leader of Teaching Assistant Training
8/2010–12/2010	Reviewer for AISTATS
8/2010	Reviewer for Machine Learning
4/2010–5/2011	First-Year Mentorship Coordinator
9/2010	Panelist for Duke Graduate School's "Navigating the Teaching Assistant Role: From Protégé to Professional Development"
8/2010	Leader of Teaching Assistant Training
6/2010–8/2010	Mentor for the Computer Science Undergraduate Research Fellows Program
1/2010–5/2010	Student Faculty Search Coordinator
4/2010	Reviewer for Machine Learning
4/2010	Graduate Student Representative to the External Review Committee
2/2010	Reviewer for the Journal of Machine Learning Research
8/2008–12/2009	Duke Robotics, Intelligence, and Vision Coordinator
10/2009	Member of the Strategic Plan Student Advisory Committee
8/2006–5/2007	Graduate and Professional Student Council Departmental Representative

Presentations

6/2010	<i>Duke University, "Intelligence From Data: An Introduction to Machine Learning and its Applications." C-SURF, Durham, North Carolina.</i>
6/2010	<i>International Conference on Machine Learning, "Feature Selection Using Regularization in Approximate Linear Programs for Markov Decision Processes." ICML, Haifa, Israel.</i>
2/2010	<i>Davidson College, "Do Androids Dream of Electric Sheep: The Realities of AI." Math Coffee, Davidson, North Carolina.</i>
6/2009	<i>International Conference on Machine Learning, "Kernelized Value Function Approximation for Reinforcement Learning." ICML, Montreal, Quebec.</i>
1/2006	<i>Joint Mathematics Meetings, "Imagemosaics: Painting with Pictures." Joint Mathematics Meetings, San Antonio, Texas.</i>
10/2005	<i>Regional Undergraduate Mathematics Conference, "Imagemosaics: Painting with Pictures." Regional Undergraduate Mathematics Conference. University of North Carolina-Greensboro, Greensboro, North Carolina.</i>

Graduate Coursework

8/2010–12/2010	College Teaching and Visual Communication, Colloquium on the Academic Profession
1/2010–5/2010	College Teaching Practicum
1/2009–5/2009	Spatial Statistics
8/2008–12/2008	Computer Vision
1/2008–5/2008	Linear Models
8/2007–12/2007	Machine Learning, Advanced Architecture
1/2007–5/2007	Operating Systems, Robotics
8/2006–12/2006	Artificial Intelligence, Algorithms, Scientific Computing