

Matthew J. Howard

Education

Master of Science, Computer Science, UC Santa Cruz, 2019 (expected)

Bachelor of Science, Computer Science, University of Delaware, 2014

Bachelor of Mechanical Engineering, University of Delaware, 2014

Experience

Industry

Data Science Intern | Adobe Systems Inc. | 2015 - 2016

- Advised by Eunyee Koh
- Investigated relational models for probabilistically resolving unique entities from anonymous and semi-anonymous web activity using Probabilistic Soft Logic (PSL)

Research Intern | Palo Alto Research Center (Xerox PARC) | 2015

- Advised by Mike Roberts and Dave Gunning
- Developed context-aware probabilistic model to predict mobile device activity usage using Probabilistic Soft Logic (PSL)

Academia

Graduate Researcher | UC Santa Cruz | 2014 - 2016

- Advised by Lise Getoor
- Explored statistical relational learning models, with specific emphasis on large-margin structure learning of rankings for recommendation on social networks

Undergraduate Researcher | University of Delaware | 2011 - 2014

- Advised by Lori Pollock and Vijay K. Shanker
- Investigated natural language processing applications on software source code
- Developed model to extract semantic relationships from code repositories

Teaching

Teaching Assistant | UC Santa Cruz | 2016

- Course: Artificial Intelligence (CMPS140)
- Upper-division AI course covering such topics as adversarial search, MDPs, reinforcement learning, constraint satisfaction problems, and Bayesian networks.

First-Author Publications

“Automatically Mining Software-Based, Semantically-Similar Words from Comment-Code Mappings.” Mining Software Repositories 2013. **Best Research Paper Award.**

Awards & Honors

Regents' Fellowship, UC Santa Cruz, 2014

Hatem M. Khalil Memorial Award, University of Delaware, 2014

Robert T. Bosworth Scholarship, University of Delaware, 2014

Best Research Paper Award, Mining Software Repositories 2013

Benjamin E. Herring Scholarship, University of Delaware, 2012

Science and Engineering Research Scholar, University of Delaware, 2012

Relevant Technical Projects

Object Detection and Localization in ImageNet, UC Santa Cruz, 2019 (ongoing)

Latent Structured Preference Learning, UC Santa Cruz, 2015 - 2016

Using the Social Network to Predict Ratings on Yelp with PSL, UC Santa Cruz, 2014

Contact

Email

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Web

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Skills

Machine Learning:

Graphical Models,
Structured Prediction,
Neural Networks,
Logistic Regression

Programming:

Python,
Java, HTML/CSS, Unix,
SQL

Frameworks:

Pandas,
TensorFlow, Keras

Relevant

Coursework

- Machine Learning
- Advanced Topics in ML
- Algorithms
- Artificial Intelligence
- Crowdsourcing
- Database Systems