ERIK BRINKMAN

PERSONAL INFORMATION

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EDUCATION

University of Michigan

2012-2017 **Ph.D. in Computer Science and Engineering**

GPA: 3.81 · Recipient of STIET Summer Research Grant
Coursework: Machine Learning · Online Learning · Reinforcement Learning · Social Networks

Washington University

2006-2010 **Bachelor of Science in Systems Science and Engineering**

GPA: 3.88 · *Magna cum Laude*
Coursework: Algorithms for Nonlinear Optimization · Nonlinear Dynamic Systems

WORK EXPERIENCE

University of Michigan

2012-Present **Graduate Student Research Assistant**

- Studied auction settings where having access to public information is bad for all agents (AAMAS 2014)
- Analyze the effects of latency competition between high frequency trading firms using simulation based game theory
- Investigate the relative benefits of discrete clearing versus continuous financial markets with complex agent behavior

Elance-oDesk

Summer 2014 **Research Intern**

- Developed search ranking optimization based on click-through data
- Built profile photo categorizer for demographics and search ranking

University of Michigan

Fall 2013 **Graduate Student Instructor**

- Taught weekly fifty-student discussion section for Algorithms and Data Structures
- Designed laboratory projects, created grading rubrics, held office hours, and graded student work

MIT Lincoln Laboratory

2010-2012 **Researcher**

- Implemented an efficient topic modeling algorithm (PLSA) in MapReduce
- Prototyped real time entity resolving and disambiguation system for news corpora
- Designed a database that supports general queries on geographic descriptions
- Adapted aggregate movement model between data modalities

LEADERSHIP

CSE Grad Student Organization *2013-Present* Organized social activities such as kayaking, whirlyball, and bar crawls

UM ICD REU *Summer 2014* Mentored REU student in implementing an online learning market making strategy

UM SURE *Summer 2013* Mentored SURE student in modifying a market simulator to model communication delays present in real markets

IM Broomball *2012-Present* Co-captained IM Grad/Faculty/Staff Champion Team

PROGRAMMING LANGUAGES

Python (Numpy, Scipy, Scikit-Learn) · Java · Bash · SQL · C++11 · Haskell · Matlab · Lua