# ERIK BRINKMAN

#### PERSONAL INFORMATION

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**EDUCATION** 

2012-2018 Ph.D. in Computer Science and Engineering

ANN ARBOR, MI

University of Michigan

GPA: 3.81 · Recipient of STIET Summer Research Grant

Coursework: Machine Learning · Online Learning · Reinforcement Learning · Social Networks

2006-2010 BS in Systems Science and Engineering

St. Louis, MO

Washington University

GPA: 3.88 · Magna cum Laude

Coursework: Algorithms for Nonlinear Optimization · Nonlinear Dynamic Systems

#### WORK EXPERIENCE

# 2012-Present Graduate Student Research Assistant

ANN ARBOR, MI

University of Michigan

- Studied auction settings where having access to public information is bad for all agents (AAMAS 2014)
- Demonstrated surprising efficiency of continuous double auctions in the presence of strategic agents (Submitted JEDC)
- Investigating how to design a modern frequent call market using empirical mechanism design
- Analyzing "Flash Crash", metrics that indicated susceptibility, and policies that mitigate risk in the presence of strategic traders

#### Summer 2015 Intern

San Francisco, CA

Yelp

- Modified auto-bidder to increase advertiser return on investiment
- Ran live experiments to determine modification effects and optimal parameters

# Summer 2014 Research Intern

Mountain View, CA

Elance-oDesk

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

### Fall 2013 Graduate Student Instructor

Ann Arbor, MI

University of Michigan

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

### 2010-2012 Researcher

LEXINGTON, MA

MIT Lincoln Laboratory

- 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 2013-2015 Organized social activities such as kayaking, whirlyball, and bar crawls

UM REU / SURE

Summers Mentored students on designing market simulators, implementing online learning algorithms, and using distribution free statistical techniques

IM Broomball

2012-2016 Co-captained IM Grad/Faculty/Staff Champion Team

PROGRAMMING LANGUAGES

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