# Michael Wang (Last Updated 1/9/19)

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## **Education**

#### **Georgia Institute of Technology**

B.S. Industrial Engineering and Computer Science

- Cumulative GPA: 3.97/4.0

Atlanta, Georgia 2015 - 2019

#### **Publications**

- Kolb, I., Franzesi, G. T., Wang, M., Kodandaramaiah, S. B., Forest, C. R., Boyden, E. S., & Singer, A. C. Evidence for long-timescale patterns of synaptic inputs in CA1 of awake behaving mice. *Journal of Neuroscience* (2018)
- Wang, M., Gupta, S. Fairness in the Face of Uncertainty. *NeurIPS Workshop on Ethical, Social and Governance Issues in AI* (2018)

## Work Experience

## **Two Sigma Investments**

New York, NY

Software Engineering Intern

May 2018 - Aug 2018

- Platform Engineering Team in Two Sigma Insurance Quantified
- Built a system for automated anomaly detection of system logs for security purposes
- Tools: AWS services, Terraform, and Python

#### **Dropbox**

San Francisco, CA

May 2017 - Aug 2017

Software Engineering Intern

- Marketing Platform Team
- Built service for creating dynamic marketing campaigns which respond to user actions
- Tools: Python, React, and TypeScript

## **Projects**

#### **Grady Memorial Hospital Infusion Center Optimization**

with Ayush Agrawal, Vivek Jajoo, Kendall McRae, Nihal Shah, Rohil Shah, Mauricio Taborga, and Kexin Zhang

- Scheduling to increase patient throughput under limited resources and uncertainty

#### **Learning over Permutahedrons**

- with Daniel Ulch and Swati Gupta
  - Optimizing runtime of the direction-finding subproblem of Frank-Wolfe using approximate sorting

### **Learning Browsing Behavior**

with Rachel Cummings and Elizabeth Krizay

- Building a chrome extension to monitor all browsing activity in order to replicate behavior link

## **Teaching Experience**

#### **ISYE 4301: Supply Chain Economics**

Atlanta, GA

Teaching Assistant

Jan 2019 - May 2019

- Principles of game theory and microeconomic analysis applied to decision-making in supply chains

#### **ISYE 4133: Advanced Optimization**

Atlanta, GA

Teaching Assistant

Aug 2018 - Dec 2018

- Theory and algorithms for linear, integer, and some convex optimization

#### CS 2200: Systems and Networks

Atlanta, GA

Teaching Assistant

Aug 2017 - May 2018

- Introductory computer systems topics such as caching, multiprocessing, and computer architecture

## **Awards, Grants & Honors**

ISYE Senior Design Winner	2018
ISYE Outstanding Junior Award	2018
COSYNE Undergraduate Travel Grant	2017
President's Undergraduate Research Award	2017

#### **Selected Coursework**

- Industrial and Systems Engineering
  - 2027 Probability
  - 2028 Statistics
  - 3044 Simulation
  - 3232 Stochastics
  - 3833 Optimization
  - 4031 Regression and Forecasting
  - 4133 Advanced Optimization
  - 4301 Supply Chain Economics
  - 4803 Online Learning and Decision Making
  - 6662 Discrete Optimization
  - 6663 Nonlinear Optimization (Spring 2019)
- Mathematics
  - 1554 Linear Algebra
  - 2106 Foundation of Proofs
  - 2603 Discrete Math

- 3012 Applied Combinatorics
- 3406 Second Course in Linear Algebra
- 4317 Real Analysis

# • Computer Science

- 1332 Data Structures
- 2200 Systems and Networks
- 3511 Design of Algorithms
- 4210 Advanced Operating Systems
- 4400 Database Systems
- 4602 Automated Algorithm Design
- 4290 High Performance Computing Architectures (Spring 2019)