

## EDUCATION

### UNIVERSITY OF CHICAGO

#### COMPUTER SCIENCE

Undergraduate | 2010

Concentration: Artificial Intelligence

## PROJECTS

### Prediction Market Analysis | 2016

Analyzed every trade ever made on Intrade Prediction Markets to identify inefficiencies, systemic miscalibrations, and profit opportunities in prediction markets.

github.com/jaibot/IntradeAnalysis

### Powershame | 2013

Independently developed full-stack application to enhance productivity by automatically recording and sharing timelapse videos of your desktop

github.com/jaibot/powershame-site

### Computational Linguistics REU @ UChicago | 2007

Investigated Automatic Tone Correction in Tonal Languages

### DIMACS REU @ Rutgers | 2006

Investigated Applications of SVMs in Seizure Prediction

## ACTIVITIES

### Seattle Rationality [President] | 2017-

Founded and led 501c3 to help people optimize the world around them and make everything marginally less broken

### Seattle Effective Altruism | 2014-

Helped grow from dozens to hundreds of members; Gave and Organized Talks, Meetups, Special Events.

### UChicago ACM [Treasurer] | 2007-2010

Revived then-defunct ACM; Organized Meetups, Lectures, Hackathons, and Programming Competitions

## AWARDS

### GOOGLE CODE JAM | 2010

Top 3000 Worldwide

### PUTNAM EXAM | 2006

Duren Prize for top score @ McDaniel

## EXPERIENCE

### LENDINGROBOT | PEER LENDING INVESTMENTS

2016 - 2017: Senior Backend Engineer; Financial Data Analyst

- Delivered **machine-learning-driven investment strategy** for world's first peer-lending robo-fund
- Delivered weekly reports to CEO detailing investment progress and recommending improvements
- Built framework to develop, test, analyze, and compare investment strategies
- Automated collection of historical and live data from multiple peer-lending marketplaces to enable more accurate analysis
- Delivered consistent **6-12% returns** on automated investments
- Enabled user-customizable strategies on primary and secondary markets
- Rewrote core investment code to eliminate errors and accelerate development
- Invested over \$50 million on behalf of clients
- Optimized systems to invest in new opportunities within 1 second of release
- Implemented metrics and alerts to identify issues in minutes instead of hours
- Notarized investment records on the Ethereum blockchain

### AMAZON | AWS NETWORKING

2014 - 2015: Systems Engineer II

- Reduced testing cycle from **weeks** to **hours** by aggressively automating test processes, enabling faster deployments with higher confidence so that AWS and amazon.com can continue to scale under accelerating demand
- Increased reliability and replication of both hardware and software qualification by formalizing, automating, and logging test conditions and outcomes
- Built custom tools to automate management of niche hardware, including industrial traffic generators, L1 switches, and bleeding-edge network hardware not yet available to the public, allowing previously time-consuming processes to be automated
- Introduced continuous deployment, creating automatic end-to-end pipelines with unit and integration testing for software under test and internal testing infrastructure
- Developed AWS Test Region to more accurately reflect actual AWS Regions
- Increased testing capacity via novel Docker deployment, enabling hardware tests to run concurrently, in isolation, on the same hardware

### DEMOCRATIC NATIONAL COMMITTEE

2011 - 2013 : Systems Engineer | 2013 : Lead Systems Engineer

- Built custom scraping tool to intelligently capture nightly snapshots of web pages and compare differences across time; Used by researchers, debate prep, Obama For America CTO Harper Reed
- Built, deployed, and proactively responded to thousands of internal metrics to ensure high availability of voter databases, get-out-the-vote infrastructure, donation infrastructure, and web pages
- Revamped backup solution to increase fidelity, reduce execution time 70%, reduce storage required 60%
- Performed empirical cost-benefit analysis between different deployment strategies of voter database (NARWAL), saving hundreds of thousands of dollars
- Deployed and managed Vertica cluster powering the NARWAL voter database
- Collaborated with Obama for America on one of the then-most-complex AWS deployments ever; visual summary at jaibot.com/awsafa