

jaibot.com | github.com/jaibot | jai@jaibot.com

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 productivity webapp. Shame Yourself Into Productivity By Automatically Sending Timelapse Videos of Your Work to Friends 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 | Engineering, Finance, and Data Science

2016 - 2017: Senior Backend Engineer

- Invested over \$50,000,000 on behalf of hundreds of users
- Delivered steady returns of 6-10%
- Built custom trading algorithm from scratch for the world's first peer-lending robo-fund
- Enabled per-user-customizable rules for primary and secondary market investing
- Created uniform API for investing across four peer-lending marketplaces
- Optimized systems to analyze, select, and invest in new opportunities within 1 second of release
- Implemented metric aggregation and alerts to identify failures and performance issues in minutes instead of hours or days

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.
- Mentored coworkers in Python, pytest, and git to enable rapid conversion of manual to automated tests, saving thousands of engineer-hours.
- 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, OFA CTO Harper Reed.
- Built, deployed, and proactively responded to thousands of internal metrics, ensuring that voter databases, get-out-the-vote infrastructure, web pages, and more remained available under rapidly growing traffic, constant deployments, and increasingly frequent attacks.
- Revamped backup solution: increased fidelity, decreased execution time 70% and 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 OFA on one of the then-most-complex AWS deployments ever; visual summary at jaibot.com/awsofa