

Jai Dhyani

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EDUCATION

UNIVERSITY OF CHICAGO

COMPUTER SCIENCE

Undergraduate | 2010

Concentration: Artificial Intelligence

PROJECTS

POWERSHAME (INACTIVE)

Shame Yourself Into Productivity By Automatically Sending Timelapse Videos of Your Work to Friends

Site/API: Python • Flask • AWS S3, EC2, IAM • jQuery • Bootstrap • Ansible • PostgreSQL

Client: Python • wxWidgets • boto

Renderer: Python • RabbitMQ • ffmpeg
github: powershame-{site|client|renderer}

UPDATEYOURPASSWORDS

Single-page tool to update passwords and 2FAs

jQuery • bootstrap

jaibot.github.io/updateyourpasswords

TIMELOCK (INACTIVE)

Generate RSA keypairs; Schedule Release of Private Keys

Flask • PyCrypto

github: jaibot/timelock

AWARDS

GOOGLE CODE JAM

2010

Top 3000 Worldwide

PUTNAM EXAM

2006

Duren Prize for Top Putnam Exam score at McDaniel College

ACTIVITIES

UChicago ACM Treasurer | 2007-2010

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

Seattle Effective Altruism | 2014-Present

Helped grow from dozens to hundreds of members; Gave and Organized Talks, Meetups. Led largest annual community event in 2014 and 2015.

DATA SCIENCE

INTRADE ANALYSIS | SYSTEMIC ERRORS IN PREDICTION MARKETS

2016 (Ongoing)

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

EXPERIENCE

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

RESEARCH

COMPUTATIONAL LINGUISTICS REU @ UCHICAGO | 2007

Investigated Automatic Tone Correction in Tonal Languages

DIMACS REU @ RUTGERS | 2006

Investigated Applications of SVMs in Seizure Prediction