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.

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 continious 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 remainied 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

INTRADE CALIBRATION ANALYSIS | 2016 (FORTHCOMING)
Analyzed every trade ever made on Intrade Prediction Markets to identify inefficencies and systemic miscalibration.

COMPUTATIONAL LINGUISTICS REU @ UCHICAGO | 2007
Investigated Automatic Tone Correction in Tonal Languages

DIMACS REU @ RUTGERS | 2006
Investigated Applications of SVMs in Seizure Prediction