# Jai Dhyani

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# **EDUCATION**

## **UNIVERSITY OF CHICAGO**

COMPUTER SCIENCE

Undergraduate | 2010 Concentration: Artificial Intelligence

# SIDE PROJECTS

## **POWERSHAME (INACTIVE)**

Full-Stack Web Site, API, and Desktop Client

Built social application to produce and share time-lapse videos of desktop github: jaibot/powershame-site github: jaibot/powershame-client github: jaibot/powershame-renderer

#### **UPDATEYOURPASSWORDS**

Built single-page tool to update passwords and two-Factor authentication jaibot.github.io/updateyourpasswords

## TIMELOCK (INACTIVE)

Built webapp to generate RSA keypairs and schedule publication of the private key

github: jaibot/timelock

# SKILLS

#### **PROGRAMMING**

Python: Pandas, Numpy, Sklearn, NLTK, Flask, Pytest

R • Bash • SQL • LATEX • git

Familiar: C • C++ • Java • Javascript • Ruby • Clojure

#### **SYSTEMS**

Linux (Debian and Redhat families) • Relational Databases (PostgreSQL, MySQL) • NoSQL (Mongo) • Networking (L2, L3) • AWS • Docker

# **AWARDS**

# **GOOGLE CODE JAM**

2010

Top 3000 Worldwide

#### **PUTNAM EXAM**

2006

Top Putnam Exam score at McDaniel College

## **EXPERIENCE**

## **AMAZON** | AWS NETWORKING

2014 - 2015: Systems Engineer II

- Automated AWS's network testing pipeline, drastically reducing test time, increasing reliability and replication, and ensuring that AWS and amazon.com continue to scale with demand.
- Mentored coworkers in Python, pytest, and git to enable rapid conversion of manual to automated tests
- 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
- Developed AWS Test Region to 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

#### SIGNAL DATA SCIENCE PROJECT (FORTHCOMING) | 2016

Analyzed every trade ever made on the Intrade Prediction Market 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

# **ACTIVITIES**

2007-2010 UChicago ACM Treasurer: Revived then-defunct ACM

at UChicago; Organized Meetups, Lectures,

Hackathons, and Programming Competitions

2014-Present Seattle Effective Altruism: Helped grow

from dozens to hundreds of members; Gave and Organized Talks, Meetups. Led largest annual

community event in 2014 and 2015.