1400 Irving St NW, 323 Washington, DC 20010 609 948 4264

# Experience

2013-Present: Independent Developer

- Main Project: Powershame (http://powershame.com)
  - Productivity tool: Sends timelapses of your screen to friends
  - Backend: Flask webapp (user-facing site and RESTful API)
  - Asynchronous rendering via rabbitmq
  - Scalable EC2/S3 architecture, managed with Ansible
  - Cross-platform desktop client (wxwidgets)

## Democratic National Committee

- 2011-2012: Linux System Administrator (team of two w/ Leo Zhadanovsky)
- 2013: Lead Linux System Administrator
- Responsible for deploying and maintaining all major DNC architecture during 2012 Election Cycle
- Managed 200+ physical servers, mostly CentOS, including:
  - Vertica cluster
  - Hadoop cluster
  - High-availability web servers (Apache and Nginx)
  - Web application servers (Java frameworks and Ruby on Rails)
  - Load balancers (BigIP)
  - MySQL, Postgres, and Mongo DBs
  - Postgres mail servers
  - SAS and iSCSI RAID storage arrays
  - Xen and VMWare clusters
  - Secure network infrastrucutre implementing multiple VLANs, and high-availability (redundant) firewalls and routers, and minimum-permission configurations
  - Installed and maintained all hardware on-site and at colo
- Extensize AWS utilization, including but not limited to:
  - Multiple services hosted on EC2, scaled via Cloudwatch
  - S3 for static assets and one-off static sites
  - RDS for backend persistance
  - SES for high-volume mail sends
  - Route 53 for DNS
  - IAM for least-access delegation
- Designed hardware and/or cloud solutions on a per-problem basis
- Automated deployments using Jenkins, Puppet, shell scripts, and git hooks
  - Deployed projects include: CallTool, GottaRegister, Narwal, http://democrats.org,
    Democrats Abroad, Vote From Abroad, and the DNC online store
- Customized backup and restoration system for servers and DBs
- Built tracking tool to create nightly, browsable snapshots of third-party websites
- Implemented 800+ nagios checks, including custom checks
- 24/7 on-call responsiveness for all Nagios and Pingdom checks
- Implemented PCI compliance

Appliance Builders Wholesalers

- 2008-2010: Chief Technology Officer
- $\bullet$  All IT-related responsibilites for a small company of 50+ users in 4 locations

#### Research

2007: University of Chicago, Speech Synthesis for Tonal Language

2006: Rutgers DIMACS, Support Vector Machines and Seizure Prediction

## Skills

Linux: 10 years experience deploying and maintaining servers (CentOS, Debian)

Python: 8 years experience

Misc Languages: Various experience with C, C++, Java, Lisp/Scheme

DBs: MySQL, Postgres, Vertica, Mongo

Extensive experience with AWS

## Education

University of Chicago, 2009

- Computer Science
- Focus on Artificial Intelligence and Machine Learning

## Hobbies and Misc

Project Euler

Google Codejam 2010, top 2000 worldwide

http://github.com/jaibot

University of Chicago ACM, 2006-2009