

Phone: (626) 723-3427
Email: nelson@mindexflakes.com
GitHub: <http://github.com/nelsonjchen>
Santa Barbara, CA

Education

2008 - 2012

BACHELOR OF SCIENCE

Computer Science at the University of California, Santa Barbara

Experience

SMARTRECEIPT INC. | SANTA BARBARA, CA

Software Engineer

December 2012 - ...

Advised upon real-world development and systems administration practices. Contributed to whole infrastructure refactoring with Chef and Salt Stack. Contributed and maintained organization's main product offering's parsers and internals. Developed new rapid kitchen, vagrant, and automated testing workflow for Chef infrastructure development and application development. Ported and applied same "clean room sandbox" workflow to organization's legacy Rails application. Investigated feasibility and experimented with full end-to-end Integration testing on Company's main product. Observed business, administration, and financial practices.

BECAUSE OF HOPE (NONPROFIT 501(C)3) | SANTA BARBARA, CA

Web Engineer

2012 - ...

Maintained existing website and VPS. Drafted and implemented plans to help organization reduce hosting costs, increase website performance, reduce maintenance, and provide effortless scaling using Amazon Web Services. Reimplemented website using static site generators and modern front-end frameworks.

UCSB ASSOCIATED STUDENTS | SANTA BARBARA, CA

Technical Committee Vice Chair

2009 - 2012

Managed technical matters of committee activities including public website and internal software and hardware.

Designed, setup, configure, and maintained a VMWare, Linux, Windows, and pfSense-based network, accompanying virtual machines for file sharing and network traffic management, and devised and improved upon workarounds for problematic network issues for LAN Parties for 150+ attendees for every quarter since Fall of 2009 until December 2012.

UCSB HOUSING RESIDENTIAL NETWORK | SANTA BARBARA, CA

Network Consultant

2009 - 2012

Helped residents in UCSB Residential Housing get their devices online with ResNet. Developed tools to streamline configuration of these devices for printing to shared printers and to automatically configure the network. Helped physically install switches and hardware in dozens of locations on campus. Internal documentation with regards to networking and procedures was also maintained by me. Assisted users one-on-one in troubleshooting any connectivity issues both simple and complex. Produced automated graphical setup tools for all major platforms to assist in configuration of 10,000 user systems with Printing and Wi-Fi Configuration.

Selected Personal Projects and Contributions

UC SANTA BARBARA SUBREDDIT DESIGN | SANTA BARBARA, CA

Creator and Maintainer

May 2012 - ...

Produced most advanced Python, Ruby, and SASS framework and deployment tool for developing preprocessed stylesheets and templated markdown for section of website subscribed to by 3,000 users. Said framework is easy to deploy with intuitive and minimal configuration and utilizes accepted standard Python and Ruby support tools. Framework is easy to extend should more advanced functionality be required (e.g. technical rivalries with other student bodies at other higher-learning institutions). Also produced all design and artwork from scratch and released under CC-BY-SA.

Interests, Skills, and Hobbies

- **Languages** – Ruby, Python, Scala, and Java
- **Operating Systems and Platforms**
 - Ubuntu – Packaging and Administration
 - Mac OS X – Homebrew Recipes and launchd
 - Android – Native Java development
 - Development and Operations – Test-driven Chef, Salt Stack, Packer
 - On-demand Compute and Storage – Amazon Web Services and Rackspace Cloud
 - Heroku – Ruby on Rails, Play Framework 2, and automated scripts
- **Computer Networking** – iptables, pf, and pfSense
- **IDE** – IntelliJ IDEA and friends, Eclipse, Vim, Unix
- **Databases** – PostgreSQL and SQLite
- **Web Development** – HTML5, SCSS, LESS, nanoc, Ruby on Rails, Play Framework 2, JavaScript, jQuery, Zurb Foundation, Bootstrap, REST, and JSON
- **Project Management** – Trello, HipChat, and accompanying integration tools
- **Version Control** – git, Subversion, and Mercurial
- **Misc. Skills** – AMPQ, Logstash, OpenStreetMap, AutoHotKey, and \LaTeX