

# ROD WOODMAN

Sunnyvale, CA

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## SUMMARY

Software developer with a background in designing tools used to analyze and troubleshoot complex systems. Balances systems thinking with an attention to detail to solve full-stack challenges. Values the whole-product design and its content too, not just the technical side. Draws inspiration from great information communicators like Edward Tufte and Steve Krug. Looking to engineer dashboards and user interfaces as part of a focused team.

## TECHNICAL SKILLS

**Languages:** HTML, CSS, JavaScript, Go, Python, Swift, PHP, SQL, C, Tcl  
**Frameworks:** AngularJS, ExtJS, jQuery, Bootstrap, Highcharts, D3.js, Flask, Node.js, Socket.io, MongoDB, SQLite,  
**Tools:** APIs, Git, SVN, Bitbucket, JIRA, LESS, SASS, Docker, XCode, FireBug, Google Analytics, bash, vim, Sublime Text 2, Adobe CS5.5, Photoshop, Illustrator, Moqups, Balsamiq, Omnigraffle  
**Methods:** OOP, APIs, REST, SPA, TDD, clickable prototype, wikis, pair programming, hackathons, agile, responsive design, user-centered design (UCD), wireframes, card sorting, site maps

## EDUCATION

**Coding Dojo** | Blackbelt, MEAN Stack | San Jose, CA (Web MVC software)  
**UCSC Extension Silicon Valley** | Web Design Certificate | Santa Clara, CA (Web design & UX)  
**Santa Clara University** | M.S. Computer Engineering | Santa Clara, CA (networking firmware)  
**California Polytechnic State University** | B.S. Electronic Engineering | San Luis Obispo, CA (hardware)

## EXPERIENCE

**ARUBA NETWORKS (A Hewlett Packard Enterprise Company) - Santa Clara, CA** **2016-present**  
*Aruba Networks is an 1800-person mobile-first networking company owned by Hewlett Packard Enterprise Company.*

### Full Stack Developer

Solely responsible for the development of the ClearPass config auditing tool, aka ACME. This is a management tool extension for the Aruba ClearPass UI that allows the owners of many ClearPass clusters to interrogate and optionally remediate the configs of all of their systems. It includes a focusable results dashboard with visuals, multi-layer filtering, and export functionality. The application is a Web front-end dashboard (ExtJS, SASS) and an Aruba-ClearPass-hosted back-end (Go, Docker, REST APIs).

- Designed the UI from wireframes, and iterated over time based on customer feedback.
- Integrated the mountains of summary and detail results with appropriate, clickable visuals.
- Connected all front-end buttons to back-end services.
- Implemented stateful, back-end sorting and filtering of results for each different user click target.
- Leveraged two different types of internal APIs for reading and writing configuration data.

**TRUEPATH WIRELESS - San Jose, CA****2015-2016**

*Truepath Wireless was an 11-person startup that provided terrestrial, wireless Internet to cruise ships near port.*

**Senior Software Engineer, NMS**

Solely responsible for the Network Management System (NMS) product. This code logs, displays, and reports all of the continuously-collected network quality data from dozens of mobile endpoints. It includes device-side “agent” code (PHP/bash/cron), Web front-end dashboard code (HTML, CSS, JavaScript, Bootstrap, jQuery, jQWidgets, HighCharts, Google Maps), and server back-end code (Python, Flask, MongoDB, REST).

- Redesigned the dashboard UI to support multiple endpoint types and additional data streams. Gathered requirements from customer and business stakeholders.
- Sped up the pace of NMS improvements by releasing new code every 2-3 weeks.
- Collaborated with FW and network engineers to integrate new, third-party endpoint hardware
- Designed and implemented a compression algorithm that reduced the device-generated network quality stats files to 16% of their original size.

**CODING DOJO - San Jose, CA****2015**

*Coding Dojo is an immersive Web study program with numerous team programming experiences in 3 full stacks: LAMP, MEAN, and iOS. Participated in Hackathon held by Uber and their API. Many CRUD operations.*

**Web Developer Resident**

- **Frappy Bird** (Swift, XCode, CoreMotion API, GitHub) - A puzzling dexterity game where the objective is to orient the device in three dimensions (roll, pitch, and yaw) to match the randomly-generated target orientation. Coded in a team of 3. Winner of the one-day internal hackathon.
- **H&H Supplies** (HTML, CSS, PHP, CodeIgniter, MySQL, AWS EC2, AWS S3, Stripe API, SPA, Ubuntu, GitHub) - A fictitious e-commerce store selling horseshoes and hand grenades. Coded in a team of 3. Features include product filtering and pagination. Deployed to the cloud using Amazon EC2, Ubuntu.
- **Stock Portfolio Analyzer** (HTML, CSS, JavaScript, D3, Node.js, Yahoo Finance API, SPA, GitHub) – A tool for visualizing personal stock positions at a high level and across multiple accounts. Translates manual or CSV portfolio data into multiple visualizations using historical quote data pulled from Yahoo Finance API.

**CISCO SYSTEMS - San Jose, CA****2005-2014****Diagnostic Software Engineer**

On a team of 10+, was responsible for a test suite of diagnostic tools used to help validate new product designs and troubleshoot failures at the L2/L3 network layer of units on the company’s flagship series of switches. The product was application layer firmware code (C) and automation scripts (Tcl) in a Linux environment (tclsh, vim, Eclipse).

- Created an at-a-glance report that displayed the physical connection points and the status of the dozens of reconfigurable Ethernet links within the chassis.
- Reduced 1000 pages of chip specifications of the company’s most complex chip into a 1-page debug diagram that layered 6 variables across dozens of interconnected components.
- Designed and implemented packet-steering logic that satisfied both the legacy and next-generation link topology for the company’s flagship Catalyst 6000 Internet switches.
- Presented a well-received series of codebase transfer sessions with the China team via TelePresence. Tailored each technical presentation on the massive codebase to the feedback received.

**INTERESTS**

I feel most rewarded when others tell me that I have turned seas of information into useful pieces for them. I enjoy the perspective and meta conversations about context that are needed before any of the details matter. I always have an opinion on what matters. And so, outside of software I love **photography, writing, editing, and data visualizations** for their challenges of prioritizing and layering bits of information.