ANDREW HANNEBRINK

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Bay Area based software developer with four years experience in object-oriented design, full-stack web development, and image processing. Creative problem solver that loves new technology.

SKILLS

Languages and Frameworks: Javascript (Node, Angular, Backbone, Express), Python, SQL, MongoDB, HTML5 (including Canvas), CSS3, Underscore.js, Django, Rails, AJAX, C++, Java, MATLAB, R

Environments: Ubuntu, OSX, Bash, AWS (EC2, Route-53), Docker, VirtualBox, VMware, Adobe PhoneGap, Ripple Mobile Emulator, Jenkins, VIM, Eclipse, Visual Studio, JSHint, Jasmine

Other: Algorithms, RESTful services, browser development, unit testing, 3-D object scripting, statistical analysis

PROFESIONAL EXPERIENCE

Twin Prime (Redwood City, CA)

July 2014 – June 2015

Software Developer

- Built a web dashboard in a team of three, which provided our customers a way to explore how much faster our software made their mobile apps.
- Developed API for new customer dashboard account activation, sign-in, sign-out, and password recovery. Used Django and Django Rest Framework. Built Angular controllers and services for API communication. Users verified with CSRF tokens, session cookies, and email confirmations when appropriate.
- Created Node.js API endpoints for supplying D3.js chart data, which dynamically built SQL queries allowing users to filter data by time interval, device type, network type, status codes, region, and apps.
- Improved internal response time to key customer events by conceiving a Jenkins-montitored email report system. Wrote Python script for pulling relevant data from disjoint sources (MongoDB, PostgreSQL, and Amazon S3), and reported when customers downloaded our SDK, went live with our software, and had fluctuations in traffic.
- Constructed and automated E2E and unit tests for freshly deployed API instances using Jasmine.

Washington University in St. Louis IS&T (St. Louis, MO)

Summer 2013 – July 2014

Assistant UNIX Systems Administrator

- Devised a fully automated Python/MySQL software system for parsing daily Infoblox DHCP log files with complex syntax, recording client info and ACK events with a relational database, dynamically searching that database, deleting outdated records, and extending captive portal leases accordingly with the Infoblox API.
- Wrote server-side scripts for monitoring, recording, and searching when and where any user is logged into an oncampus access point (Cisco or Meru), using Python, crontab, and a relational SQLite3 database.

PERSONAL PROJECTS

Emoji Twitter Bot and Interactive Landing Page

July 2015 - Present

- Govern high-traffic Twitter bot (~15k tweets/month, > 85k lifetime tweets, > 9k followers) who processes emoji photo-mosaics of each image tweeted to it. (twitter.com/tiny_peon). Used npm's Twit module. Rate-limited tweets and queued them in Mongo for delayed reply when experiencing high-traffic.
- Created website (<u>tinyicon.co</u>) with interactive front-end where users can upload photos to make their own photomosaic images. Used Node, Express, Angular, and MongoDB.
- Currently working on a mobile-optimized version of tinyicon.co using HTML5 Canvas and Backbone.js. Tackling responsive design with CSS media queries and testing with Adobe PhoneGap's Ripple emulator. Improved load time by sending pre-calculated average RGB values in static JSON files.

Photo-Mosaic Video Generator

April 2014 – December 2014

- Produced video content for Blackdove's motion art platform and product launch at Miami Art Basel 2014.
- Wrote Python software for re-editing mp4s as photo-mosaic videos (<u>vimeo.com/tinyicon</u>). Used ffmpeg and Python's PIL module for automating frame editing processes.

 (github.com/andrewhannebrink/photo-mosaic-video-generator)

EDUCATION

Washington University in St. Louis

St. Louis, MO

Bachelor of Arts, December 2013

Double Major: Computer Science, Math (Statistics and Probability Focus)

GPA: Computer Science (3.23), Math (3.47), Overall (3.18)