

Marcus McCurdy

marcus.mccurdy@gmail.com • github.com/volker48 • www.linkedin.com/in/marcusmccurdy
240 Montrose ST • Philadelphia, PA 19147 • +1714-791-8345

Summary

Engineer at heart who has always loved seeing the joy building something useful can bring to others.

I'm a passionate and pragmatic programmer who believes done is better than perfect while at the same time believing that software shouldn't be rushed. I enjoy writing correct code while maintaining a sense of

urgency and momentum. I use testing to provide myself with a tight feedback loop and the freedom to refactor without fear. I thrive working in an environment where I can collaborate with other developers on different aspects of our project resulting in a cohesive business feature that brings value to the company.

Experience

500nRed

PHILADELPHIA, PENNSYLVANIA

Sept'12 – Present

Lead Software Engineer

- Lead developer on 500nRed's cross-browser JavaScript extension platform. A Python Flask web app backed by a MySQL database and SQLAlchemy ORM. The Flask app is served by Unicorn and proxied by NGINX.
- Worked closely with operational analysts to provide custom reporting on 50's internal PHP dashboard and MySQL database.
- Updated a manual process of editing JavaScript in text fields and transformed it into a single page AngularJS application providing a simple interface for creating ad units that are compiled into fully functioning JavaScript ad units.
- Revolutionised 50's Python web scraping framework by rewriting a synchronous process into an asynchronous job queue with [RQ](#).
- Major contributor to 50's Java and Jetty based popup serving daemon processing billions of requests daily.
- Implemented a concurrent Java application to process and aggregate terabytes of Akamai log files daily and store them in a PostgreSQL database.
- Extensive Amazon AWS deployments and provisioning with Ansible.
- Installed and maintained a Sentry event logging server to track errors across Java, Python, PHP, and JavaScript code bases.

Open Source Projects

PHILADELPHIA, PENNSYLVANIA

Sept'12 – Present

Developer

- [DogePricer](#) a Chrome extension leveraging REST APIs to provide up to date prices of a cryptographic currency. It also provides setting custom price alerts and API polling frequency.
- [Flask-Mandrill](#) is a Flask extension that reduces the boilerplate needed to send email using Mandrill.
- [HashColor](#) a simple Python Flask web app that generates a unique hex color code for a given string. This unique color can be used to provide a background color based on an application user's username or email address.
- [Namgen](#) a Python Flask app that utilizes NumPy and the NLTK names corpus to probabilistically create realistic names.

Drexel University

PHILADELPHIA, PENNSYLVANIA

Apr'09 – Sept'12

Research Engineer

- Performed background research and drafted a proposal for an internal R&D online learning project focusing on integrating artificial intelligence into Drexel's online courses. Proposal after research was approximately \$700,000 under initial estimates and was presented to the president of the university.
- Technical lead on a US Army funded Android development project. Assessing the feasibility of and implementing agent based networking applications. Also created scenarios for testing and evaluation of networking protocols and performed the evaluations.
- Team lead in the design and implementation of a distributed collaborative battle command planning system for the US army. Oversaw and mentored junior developers during the project while working closely with the lead system integrator to deliver a premium product. Integrated the final product with systems from French and German allies. Extensive use of Swing and NASA's World Wind.

- Designed and implemented an HTTP proxy in C# for a biometrics fingerprint scanner and web-server. The proxy was for both the client application of the fingerprint scanner and the webserver for matching and enrolling biometrics data. The proxy enables the client and server to use an in house pure C content based networking middleware.

NSWC PHD

PORT HUENEME, CALIFORNIA

Combat System Engineer

Jul'07 – Apr'09

- Responsible for installation and configuration of remote assistance systems on US Navy cruisers and destroyers. Remote system saved time and money by allowing shore based experts to provide remote support to sailors both at sea and when docked. Resulted in a dramatic cost savings and decreased the turn around time for repairs.
- Communicated directly with System Test Officer (STO) to ensure minimal or no down time while installing routers and software for remote support.

Geeksquad

WESTMINSTER, CALIFORNIA

IT Consultant

Aug'02 – Jul'07

- One of the first agents when Best Buy acquired Geeksquad.
 - Pioneered and assisted in the roll-out of processes and procedures to the entire company.
-

Education

Drexel University

PHILADELPHIA, PENNSYLVANIA

Masters degree in Computer Science

2009 – 2012

Focused on Artificial Intelligence.

California State University at Long Beach

LONG BEACH, CALIFORNIA

Bachelors degree in Computer Engineering

2001 – 2007

Minor in Computer Science.

Skills

Technical specialties: I have a passion for programming and often program just for fun. I've written the most code in Python, Java, PHP, and JavaScript. While Python is currently my favorite I try to remain language agnostic and thoroughly enjoy learning new languages and I've dabbled in Go and Ruby. I've also worked with both C and C++ including embedded programming in C on the 8051 microcontroller. Experience with web technologies HTML, CSS, and LESS. Extensive experience with XML and JAXB. Written the most SQL for both MySQL and PostgreSQL and deployed both databases to AWS and DigitalOcean. Linux system administration (mostly Ubuntu) on AWS and my own personal machine. I use Git and Mercurial daily. I currently use IntelliJ as my IDE, but have used Visual Studio for C# and C++ development. I have also used Netbeans and Eclipse for Java development. My editor of choice is Vim despite attempts to coerce me into using Emacs.

Natural languages: English (*native*), German (limited).

Interests

Non-exhaustive and in alphabetical order: Biking, cooking, cryptographic currencies, Crossfit, gaming, hiking, Olympic lifting, programming, reading, and running.