Drew Volz

www.drewvolz.com - drewvolz@icloud.com

Experience

thoughtbot

Software Engineer

October 2018 – March 2020

As a software engineer at thoughtbot, I worked within startups and Fortune 500 companies to build out validated MVPs and fully-fledged products. I've worked with clients like Etsy and Houseparty across a range of mobile and web codebases, including interoperable Swift/Objective-C, React Native, React, and TypeScript.

Lexmark

Software Engineer II

June 2016 – August 2018

Technical Rotation Program which consisted of three, eight-month rotations. During my three rotations I worked on firmware flashing, mobile applications, and manufacturing automation.

Manufacturing Automation Systems Engineering Team (November 2017 – August 2018)

- Developed web-based status screen system.
- Implementation of a websocket-based API.

Mobile Applications Team (February 2017 – October 2017)

- Developed a mobile app that enabled wireless printer configuration.
- Implementation of wireless out-of-box printer setup in firmware.

System BIOS Team (June 2016 – January 2017)

- Designed, implemented, and debugged firmware for laser printers.
- Developed a command-line firmware flashing tool.
- Maintained firmware flashing update GUI to Apple AirPrint spec.

Software Engineer Intern

May 2014 – September 2015

Mechanical Engineering Services Team

- Developed dashboards for visualizations of large manufacturing datasets.
- Developed custom tools to manage manufacturing lines of toner/photoconductive drums.

Education

St. Olaf College

■ B.A. Computer Science

(Graduated May 2016)

- Undergraduate Coursework:
 - Computational Thinking in R and Python
 - Algorithm Analysis and Data Structures
 - Software Design and Implementation
 - Programming Languages

- Independent Research in Software Dev
- Ethical Issues in Software Design
- Mobile Web Graphics/Computing Apps
- Capstone: Tiled-Display Rendering

Projects

All About Olaf and CARLS - iOS & Android apps

- Unofficial mobile apps for St. Olaf and Carleton College.
- Cross-platform development in React Native, testing, continuous integration with CircleCI / Travis.
- Open Source, published on Apple App Store and Google Play Store.

Bottomless — iOS app

- Open Source unofficial mobile app to track and manage coffee subscriptions from Bottomless.
- Written in SwiftUI and the Combine framework.

Tiled-based display rendering — Mac mini networking cluster

- Designed a coherent display to model large data across many computers.
- Defined a format for uniformly configuring computers to communicate and share data.
- Calculated the limitations of network, software, and hardware used.

Picasso — Steganographic text/image encryption

- Designed a software utility that can translate Portable Pixmap Format (PPM) files to Scheme.
- Developed a method for encoding ASCII values into RGB values inside image pixels.

Volunteering

Haiti Health Initiative (January 2017 – Present)

Praying Pelican Missions (June 2011)