Drew Volz

www.drewvolz.com – drewvolz@icloud.com

Experience

thoughtbot   **Software Engineer**   **October 2018 – March 2020**

- Interoperable Swift/Objective-C iOS development across messaging, design system components and analytics for an e-commerce company.
- TypeScript/React web app development for a face-to-face social network startup.
- React web app development for a pet insurance startup.
- Open-source web app development in Elixir/Phoenix/JS for an announcement platform.
- Internal app development on custom tooling for scheduling, finances, and operations dashboards.

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 – Mobile Applications
- Unofficial iOS and Android mobile apps for St. Olaf and Carleton College.
- Testing, continuous integration with CircleCI and Travis.
- Open Source, published on Apple App Store and Google Play Store.

Tiled-Based Display Rendering
- 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)