

Andrew Volz

www.drewvolz.com

Telephone: (303) 946-2276 Email: drewvolz@icloud.com GitHub: drewvolz

Education	St. Olaf College <ul style="list-style-type: none">▪ <i>B.A. Computer Science</i>▪ <i>Undergraduate Coursework:</i><ul style="list-style-type: none">▪ Computational Thinking in R and Python▪ Algorithm Analysis and Data Structures▪ Software Design and Implementation▪ Programming Languages Graduated May 2016	
	<ul style="list-style-type: none">▪ Independent Research in Software Dev▪ Ethical Issues in Software Design▪ Mobile Web Graphics/Computing Apps▪ Capstone: Tiled-Display Rendering	
Employment	Lexmark Software Engineer II June 2016 – Present <p>Technical Rotation Program which consists of three, eight-month rotations. During my three rotations I've worked on firmware flashing, mobile applications, and manufacturing automation.</p> <p><i>Manufacturing Automation Systems Engineering Team</i> (November 2017 – Present)</p> <p>As a member of the MASE team my responsibilities include:</p> <ul style="list-style-type: none">▪ Developing web-based status screen system to run the manufacturing facility.<ul style="list-style-type: none">▪ Web development in React, Meteor, and MongoDB.▪ Developing a drawing library with D3 and Canvas.▪ Implementing a websocket-based API between client and manufacturing servers. <p><i>Mobile Applications Team</i> (February 2017 – October 2017)</p> <p>As a member of the Mobile Apps team my responsibilities included:</p> <ul style="list-style-type: none">▪ Developing the Lexmark Mobile Setup Assistant application.<ul style="list-style-type: none">▪ iOS development in Objective-C.▪ Android development in Java.▪ Implementation of wireless out-of-box printer configuration. <p><i>System BIOS Team</i> (June 2016 – January 2017)</p> <p>As a member of the System BIOS team my responsibilities included:</p> <ul style="list-style-type: none">▪ Designing, implementing, and debugging firmware for laser printers.▪ Implementing a command-line firmware flashing tool.<ul style="list-style-type: none">▪ Firmware development in C and C++.▪ Maintaining firmware flashing update GUI to Apple AirPrint spec.	
	Lexmark Software Engineer, Intern May 2014 – September 2015 <p><i>Mechanical Engineering Services Team</i></p> <p>As a member of the MES team my responsibilities included:</p> <ul style="list-style-type: none">▪ Developing web applications for use in process manufacturing.<ul style="list-style-type: none">▪ Web development in PHP, HTML, and SQL.▪ Producing real-time visualizations of large manufacturing datasets.▪ Providing custom tools to manage the manufacturing line.	
Projects	<p>All About Olaf and CARLS – Mobile Apps</p> <ul style="list-style-type: none">▪ Unofficial mobile apps for St. Olaf and Carleton College.▪ iOS and Android development in React Native.▪ Testing, continuous integration with CircleCI and Travis.▪ Open Source, published on Apple App Store and Google Play Store. <p>Tiled-Based Display Rendering</p> <ul style="list-style-type: none">▪ Successfully 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. <p>Picasso — Steganographic Text/Image Encryption</p> <ul style="list-style-type: none">▪ 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. <p>Other Projects:</p> <ul style="list-style-type: none">▪ KSTO Radio: iOS App which provides live-streaming radio from 93.1 FM KSTO.▪ Traffic Cams: iOS and Android app to view live-streaming traffic cameras in Lexington, KY. <p>Languages & Technologies: C, C++, Java, Python, JavaScript, Objective-C, PHP, HTML, SQL, R</p>	
Philanthropy	<p>Haiti Health Initiative (January 2017 and 2018) Praying Pelican Missions (June 2011)</p> <p>Habitat for Humanity (April 2008) Casas Por Cristo (November 2006, July 2007)</p> <p>Christ the Servant Missions (July 2008 and 2009) Boulder Homeless Shelter (2004 – 2010)</p>	