# Derek Welty

■ weltyderek@gmail.com | □ 636-443-5464 | ♥ Kansas City, MO | ♥ www.derekwelty.com

## Education

Missouri University of Science & Technology

Rolla, MO

MS IN ELECTRICAL ENGINEERING

August 2013 - May 2018

GPA: 4.0/4.0

Missouri University of Science & Technology

Rolla, MO

BS IN ELECTRICAL ENGINEERING, MINOR IN MATHEMATICS

August 2008 - December 2012

GPA: 3.93/4.0

Experience \_\_\_

Garmin International Olathe, KS

SENIOR DESIGN ENGINEER

March 2017 - Present

• Designed and developed complex PCBs with analog, digital, high-speed, and RF circuitry

- Supported automotive mass production consumer infotainment electronics
- Project Engineer leading system design and coordinating inter-disciplinary collaboration
- · Worked and visited with factory team in Taiwan to design for testing and manufacturability
- Tested and debugged hardware/software with use of proficient troubleshooting skills

## **DOE National Security Campus, Managed by Honeywell**

Kansas City, MO

**ELECTRICAL ENGINEER III** 

January 2013 – March 2017

- · Lead design engineer implementing hardware and software solutions for automated test equipment (ATE)
- · Created test plans and product specifications with detailed stimuli and signal criteria
- · Interfaced with government customers and supported earned value management project planning
- US Government Security Clearance

#### **Sprint Nextel Corporation**

Overland Park, KS

Network Engineer Intern

May 2012 – August 2012

- Developed VoIP Android IMS client using Java
- Debugged client/server communications by analyzing network packets
- Utilized protocols such as UDP, SIP, and RTP

Cargill Corn Milling Inc Eddyville, IA

PRODUCTION MANAGEMENT ENGINEER CO-OP

May 2011 – December 2011

- Served as a project engineer/manager for various installations
- Focused on power, automation, and maintenance
- Hired and led a team of contractors to carry out construction projects

**Lumate, LLC**St. Louis, MO

UI/UX DEVELOPER

October 2010 - March 2015

- Created in-house and customer specific graphics for mobile apps (Android, iOS)
- Backend web development (Python, jQuery, HTML)
- Interfaced directly with customers creating logos, flyers, posters, apparel designs, and brochures.

# Skills\_

Programming: VB.NET, Python, Java, MATLAB, Powershell, Github, Subversion, TestStand, ADB, VISA Lab Equipment: Oscilloscopes, DMM, VNA, power supplies, multi-meters, Raspberry Pi, Arduino, PXI Software Tools: Schematic capture, PCB layout, Mentor Graphics, CADSTAR, OrCad, SPICE, Solidworks

Special Training: Advanced GNSS/GPS, Radar Systems Certificate, MIL-STD 1553

**Graphic Design:** Photoshop, Illustrator, LaTeX

Miscellaneous: MS Office, MS Project, Excel, Android, Linux, Windows, Jira

# Awards