

EMPLOYMENT

Product Support Engineer II, dSPACE Inc May 2019 – Jun 2019

- Test Automation via Python 2.7/3.6 + ASAM XIL API (MAPort and EESPort)
- Innovate and expand upon department processes to improve efficiencies
- Worked closely with the Paderborn, Germany-based development teams resolve software bugs and improve software experience.
- Support sales account managers by providing product knowledge
- Point of contact for resolving critical issues.
- Same duties for level 1 below.

<https://www.dspace.com/en/inc/home.cfm>

Product Support Engineer dSPACE Inc June 2016 – May 2019

- Supported industry engineers in the automotive, aerospace, academic, industrial and medical industries with their utilization of dSPACE embedded application development tools, validation and automation software, and real-time simulators.
- Utilized MATLAB / Simulink to create applications involving electric drive (3 phase PWM), RS232/422/485 serial communication, various flavors of CAN, internal combustion engine sim, ethernet UDP IP and TCP IP)
- Responsible for setting up demos at tech expos and providing product knowledge to potential customers

Associate Software Test Engineer Harman International August 2015 – June 2016

- Performed software validation and verification for infotainment units (Harley Davidson/GM/Subaru/Toyota/Scion)
- Bug discovery and issue logging
- In-vehicle field testing
- Bluetooth/Wi-Fi connectivity, device interoperability, and application testing (Bluetooth sniffing, CAN sniffing, system log collection, vehicle simulation)
- Wrote test automation scripts for the in-house automation framework (C#)

<https://www.harman.com/>

Student researcher Central Michigan University Summer 2014

- Researched 2 Photon Polymerization using long wavelength EMWs.
- Hacked together 2-D laser engraver out of DVD-R/W drives and wood. Motor stages were driven by an Arduino Mega 2560. Control code was programmed in C.
- Lead a team of STEM educators to engage in acts of engineering

Languages and Technologies: Years of Experience		
C / C++: 3 years	Java: 3 years	C#: 2 year
SQL: < 1 year	Python 2.7/3.6: 4 years	Visual C# Full Stack
Visual Studio: 2 years	JavaScript: 1 year	HTML / CSS: < 1
Eclipse IDE: 4 years	Android Studio: < 1 year	Linux / Unix: 1 year
FPGA / VHDL: < 1 year	CAD: < 1 year	

EDUCATION

Mt. Pleasant, MI Central Michigan University September 2012 – May 2015
Bachelors of Science in Computer Engineering, May 2015.

Undergraduate Coursework

Embedded systems, Object-Oriented Design, UML, VLSI, VHDL and Verilog FPGA programming, microcontrollers, circuit analysis, microelectronics, advanced data structures, algorithms, fluid dynamics, material science, assembly programming (Motorola 68HC11), Photonics

Projects

- **iOS mobile application:** Web view to interface with music application running on a custom-made portable device.
- **Arduino-based laser engraver made from scrap DVD drives:** Used to study 2-photon polymerization in chemical compound under long wavelength EMWs (see LinkedIn for pictures)
- **Drone delivery system:** hand gesture-controlled driven by an Intel RealSense camera

ADDITIONAL EXPERIENCE AND AWARDS

- ★ **Winner of Grizhacks 2016:** Took first place in Oakland University Grizhacks hackathon. I developed mobile applications on iPhone and Android which used a web view to interface with a website running on portable mini-music player my team designed (<http://grizzhacks.com/>)
- ★ **Vice President of IEEE club:** Central Michigan University 2013-2015