

Andrew Vaselaar

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Summary

I am an engineer with experience in the architecture, implementation and debugging of a wide range of embedded computing systems. This includes a variety of applications from handheld battery-powered devices through industrial process controllers. Additionally, I have very strong communication, debugging, documentation, organizational and mechanical skills, which experience has shown are vitally important to the success of a project.

Education

Texas Tech University	M.S. in Electrical Engineering	2011
Trinity University	B.S. in Engineering Science	2009

Experience**Ludlum Measurements, Inc. | Sweetwater, Texas | Project Engineer**

September 2013 - August 2017

- Developed silicon photomultiplier based radiation detection system
- Designed wireless radiation detection system for industrial environment
- Performed mixed signal circuit design, simulation, PCB layout, firmware development, testing and debugging of product
- Maintained legacy product, including debugging firmware and updating hardware in response to component obsolescence
- Upgraded improved issue tracking system and deployed company wide to improve communication of critical updates

BNSF Railway Company | Kansas City, Kansas | Supervisor Design Services

September 2011 - September 2013

- Performed debugging and validation of boolean and ladder logic programs
- Troubleshooted and tested serial and TCP/IP communications systems
- Supported cutover of new wayside systems utilizing technology unfamiliar to field personnel
- Diagnosed and reported issues regarding Positive Train Control systems
- Supported remote field personnel troubleshooting new and perpetually changing systems
- Assisted with quality assurance process development
- Planned upgrades to rolling stock defect detection network

Friedrich Air Conditioning | San Antonio, Texas | Product Test Engineer

May 2009 - April 2010

- Developed software to enable rapid testing and validation of control system firmware
- Launched production line programming and configuration software
- Created library for control system to PC communication

Skills

Linux	C	Python	MSP430	Altium Designer	Raspberry Pi
Assembly	TCP/IP	SVN/GIT	Cooking	SMT Solder	ARM
MATLAB	FreeBSD	LTSpice	Perl	Inventor	CAM/CNC