

William Cooke

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Summary

- Experienced with C++, C, C#, other high level and assembly languages
- Proficient in Object Oriented Design and implementation
- Experienced with multi-threaded, real-time and interrupt-driven software
- Comfortable using native and cross development tools on Linux and Windows
- Critical thinker with excellent problem-solving skills
- Won Distinctive Excellence Award, Circuit Cellar and Atmel AVR 2004 Design Contest
- Strong working knowledge of networking and communications protocols
- Excellent written and verbal communication
- Considerable leadership experience

Experience

July 2015 – Present Electrolux Inc. Springfield, TN

Product Engineer II, Electronics Technology Organization

- Produced software for home appliances using multi-processor architectures
- Designed and implemented Hardware Abstraction Layer for several microcontrollers
- Led code size optimization project on entire code base (20% to 50% size reduction)
- Provided training sessions on ARM Cortex M architecture
- Implemented and tested code to meet UL 60730 (safety) requirements
- Assisted with development of unit test and code review procedures and policies
- Led and assisted forward engineering projects to develop next generation interfaces
- Responsible for module design, code, test, integration, documentation, and maintenance
- Planned team schedule for several projects and met the schedule

January 2014 – July 2015 ForceX Inc. Clarksville, TN

Junior Software Engineer

- Developer on five station, networked, airborne, real-time military applications
- Led integration of new helmet mounted display into large tactical system
- Pushed for and assisted with porting code base to Linux
- Interfaced with customers and end users to determine requirements
- Worked with customer and outside suppliers to integrate entire system
- Selected as Developer of the Month in second full month of employment (March 2014)
- Worked closely with QA to integrate test feedback into development

August 2011 – December 2013 Schweitzer Engineering Laboratories Pullman, WA

Software Engineer, Power Systems Research and Development

- Primary focus on real-time and communication systems components and integration

- Developed IEEE 1588 Precision Time Protocol component with three person team
- Assisted product teams with integration of software components into product code
- Planned and implemented unit and functional tests both manual and automated
- Maintained communication protocols including IEC61850, DNP, and Modbus
- Extended and maintained legacy code across several product lines and platforms
- Created and implemented cross-training sessions at weekly group meetings
- Assisted in mentoring Associate Engineers

June 2010 – July 2011 Small Time Electronics Clarksville, TN
Owner, Firmware and Hardware Developer

- Created complete custom solutions to meet customer needs and specifications
- Provided consulting service for small Australian manufacturing company

August 2005 – April 2007 United States Army Fort Campbell, KY
Rear Detachment Supervisor, 2-506 Infantry

- Planned and coordinated work schedules and created SOP for 80 person organization
- Provided technical and logistical support for deploying and redeploying service members
- Coordinated activities of military, government, and civilian agencies and family members

October 2000 – July 2005 United States Army Fort Campbell, KY
Infantry Squad Leader, 2-506 Infantry

- Trained and mentored eight people in all areas of military readiness
- Planned and conducted operations with little or no supervision
- Ensured proper functioning and maintenance of individual and unit equipment

Education

Barr Group Embedded Software Boot Camp, May 2013

BS Physics, May 2011, Austin Peay State University

Relevant Coursework

- Image / Signal Processing
- Experimental Methods (data acquisition and circuits)
- Computational Methods
- Theoretical Methods

Other Training and Schools

- Various corporate internal code review, moderation, and code development courses
- Equal Opportunity, Unit Safety Officer, and leadership courses (US Army)

Personal Projects

- Designed and implemented small ARM Cortex personal robotics controller
- Created development framework for NXP LPC1114 processor
- Currently developing structured BASIC compiler for cross-platform development
- Currently developing ANSI FORTH interpreter for ARM Cortex processors