Jacob Calvert

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WORK EXPERIENCE

Dark Sky Technology | January 2023 - present

- Principal Engineer and Product Lead for Bulletproof Trust
- Redesigned a data-intensive system to scale to several hundred thousand software packages, millions of contributors, and multiple-millions of data points
- Designed on-prem deployment model for Bulletproof Trust

Wind River Systems | April 2018 - December 2022

- Managing all technical needs of multiple accounts
- Serving as a single technical point of contact for multiple accounts
- Architecting solutions to meet customers current and future needs
- Supporting trade shows and seminars by creating and presenting technical content

Abaco Systems, Inc | June 2016 - April 2018

- Updated IPMC offering to provide more robust and maintainable long-life support for products
- Assisted in bring-up of Scrum as a methodology while retaining AS9100C/D standards
- Served as ScrumMaster for the BIOS and Firmware team
- Designed and implemented VxWorks board support packages for Intel 32-bit and 64-bit single board computers
- Stood up Jenkins CI system in Huntsville office for VxWorks
- Addressed customer issues in VxWorks and Linux drivers for XMC/PMC add-on equipment

Textron Systems, Unmanned Systems | June 2015 - August 2015

- Designed and implemented new services for a service-oriented architecture in Java
- Designed and implemented new features within an existing applications using Java
- Participated in daily scrum and weekly planning meetings
- Participated in regular client meetings and demonstrations

ADTRAN, Inc | January 2013 - August 2014 (3 terms)

- Designed regression tests that used Python for automation and verification
- Configured equipment for large scale testing
- Managed test beds for rapidly moving code releases
- Designed and implemented several components for IPTV service delivery using C++
- Fixed bugs in many varied telecommunications components in C++
- Implemented additions to a JavaScript driven web GUI
- Fixed bugs in a complex JavaScript driven web framework for GUIs
- Actively participated in daily scrum meetings in which current progress and client interests and needs were discussed

EDUCATION

The University of Alabama - Tuscaloosa, Alabama

Bachelors of Science in Computer Engineering and Math, May 2016, GPA:
3.478/4.0

TECHNICAL QUALIFICATIONS

Programming Languages and Concepts

- Proficient in using C, C++, and Python to create systems and subsystems that will interoperate
- Experienced with Assembly programming
- Proficient in embedded systems design and development

Hardware and Protocols

- Experienced with several μC and embedded processor architectures including Texas Instruments' DSPs, Microchip's PICs, the AVR platform, and the ARM architecture
- Experienced with OpenVPX hardware architectures
- Proficient in writing drivers/wrappers for low level hardware interactions (clocking, communication, interrupts)
- Skilled in several bus protocols including SPI and I2C
- Skilled in IPMI 2.0 and VITA 46.11 protocols

Computer Skills

- Linux, VxWorks, VxWorks 653, Wind River Linux, Helix Virtualization Platform, Wind River Workbench, Eclipse IDE, PyCharm IDE
- Jenkins CI installation and administration
- GitLab installation and administration
- Hardware, software, and OS installation and configuration

KEY COMPETENCIES

Professional Skills

- Experienced with embedded systems design and debugging
- Ability to understand systems and sub-systems and interdependence
- Experienced with industry standards telecommunications technologies
- Experienced with industry standard bus and backplane technologies
- Proficient in object oriented design and implementation
- Ability to turn abstract design concepts into usable products
- Proficient in bug tracking, version control systems, and ticketing

Personal Skills

- Ability to work efficiently individually and with a team
- Strongly self-motivated and a dedicated life-long learner
- Ability to effectively communicate complex concepts to technical and non-technical audiences
- Ability to work effectively under pressure and against deadlines
- Strong time management skills