

Nicholas Foss

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LinkedIn | GitHub

Experienced professional interested in designing and developing applications on embedded systems for the defense industry. Looking to further career in the cyber and systems security engineering realm. Productive team player and leader.

Education

University of Illinois at Urbana-Champaign

BS in Computer Engineering Dec 2015

3.32

McHenry County College

Associates in Science with High Honors May 2013

3.77

Technical Skills

C/C++ | Java | Bash | Python | MatLab | HTML/CSS | Javascript | UML | Jekyll | XML/JSON/YAML | Git/GitHub | Jira/BitBucket/Confluence | Jenkins | Docker | Artifactory/Conan | CMake | Google Test | Yocto Project | DOORS | IBM Rhapsody | DevSecOps | Test Driven Development | Linux Kernel Tuning

Experience

Senior Software Engineer, Raytheon Technologies (St. Petersburg, FL) Mar 2016 - Present

- Coordinated with Systems Engineers to develop working products through requirements, modelling, design, implementation, and test
- Designed and implemented C++ applications on real-time, embedded systems for DoD contract(s)
- Analyzed system performance on embedded target(s) using tools like htop, iperf, & tcpdump
- Led customer-funded research & development effort to upgrade legacy product to new hardware and processor architecture
- Supported customer integration events both in-person at test sites and remotely from the office
- Led several innovation efforts in regards to modernizing Continuous Improvement/Continuous Delivery (CI/CD) infrastructure
- Incorporated open and modular software architecture using C++ design idioms such as Non-Virtual Interfaces (NVI), Strategy patterns, & more to promote code reusability & testability
- Led several cross-functional teams in program's SAFe organization by serving as Scrum Master, Product Owner, and Software Architect
- Presented to customer at software board reviews to articulate progress of capability development across program(s)
- Attended Raytheon training for Anti-Tamper concepts and techniques
- Attended Raytheon Anti-Tamper Technical Exchange

Student, University of Illinois (Champaign, IL) Aug 2013 - Dec 2015

- Communication Networks (TCP/IP)
- Distributed Systems
- Embedded Systems (programming on RTOS)
- Computer Security
- Computer Systems Engineering (Operating Systems)
- Digital Signal Processing (programming on FPGA using SystemVerilog)

Accounts Receivable Intern, Primesource Healthcare (Buffalo Grove, IL) Sep 2012 - Aug 2013

- Identified and corrected errors in denied insurance claims in order to collect payment for medical services provided by PrimeSource
- Worked with supervisors to restructure billing protocols to stop errors from occurring
- Updated patient information and financial transactions in Intelligent Medical Software (IMS) database

Youth Football Coach, Cary Junior Trojans (Cary, IL) Jun 2011 - Nov 2012

- Taught football fundamentals, discipline, responsibility, leadership, & teamwork to adolescents ages 12-14
- Coordinated with other coaches to come up with our 20-22 man roster each season, schedule meetings/practices, & scouting