

# 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 | Verilog | UML | Jekyll | XML/JSON/YAML | Git/GitHub | Jira/BitBucket/Confluence | Jenkins | Docker | Artifactory/Conan | CMake | Google Test | Yocto Project | DOORS | IBM Rhapsody | Xilinx Vivado Design Suite | DevSecOps | Test Driven Development | Linux Kernel Tuning

## Experience

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

- Coordinated with hardware and systems engineers to develop working software products through requirements, modeling, design, implementation, and test for DoD programs
- Integrated FOSS and COTS products into DoD applications
- Led innovation efforts by evaluating and incorporating FOSS and COTS products into Continuous Integration/Continuous Delivery (CI/CD) infrastructure and software development workflows
- Supported customer integration events both in-person at test sites and remotely from the office
- 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)
- Analyzed system performance of applications running on embedded target(s) using Linux tools like htop, iperf, & tcpdump
- Led customer-funded research & development effort to prototype legacy product on a new hardware platform with modern processor architecture
- 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