Obaid Miah

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Professional Summary

Software engineer with 5+ years of experience in an agile environment working on embedded systems, C/C++, and real-time operating systems. Proven ability to help lead integration testing efforts and help deliver rapid prototype software under tight deadlines. Passionate about learning and cross-disciplinary collaboration.

Technical Skills

Programming Languages: C/C++, Python **OS/Platforms:** Linux, VxWorks **Frameworks/Tools:** Xilinx Vivado, Git, Docker, Google Test, Workbench

Work Experience

Northrop Grumman, Redondo Beach, California

February 2020- Present

Principal Software Engineer - Top Secret (TS) Clearance

Redacted Satellite Program - Flight Software - C++

- Demonstrated initiative and autonomy while working alongside senior engineers, taking ownership of design, implementation, unit testing, deployment, and integration tasks under demanding demo and development schedule
- Participated in cross-functional efforts with teams in ASIC, Digital, Test Set, Unit Verification, and
 System Engineering, supporting Flight and Ground unit-level debug, verification, and validation phases
- Collaborated with senior engineers to identify and report critical bugs to third-party vendors and program leadership, enhancing overall product stability and reliability
- Utilized Google Unit Testing, static code analysis, and rigorous peer reviews by senior engineers to ensure high-quality, production-ready code
- Drafted training materials and conducted knowledge transfer sessions to enable other engineers to test and run software independently
- Familiar with interrupt handling, memory-mapped I/O, and protocols such as TCP/IP, UDP, SRIO, TCB, and command/telemetry systems

Redacted Satellite Program - Gimbal Control - Python

- Developed a Python-based verification tool to automate analysis of test data previously validated manually
 - Input: Hundreds of CSV files with thousands of rows, irregular data patterns, and user-defined tolerances per mnemonic
 - Output: Pass/fail summary, detailed error breakdown by timestamp and mnemonic, and best-match approximations stored in structured output directories
- The tool significantly improved team efficiency by streamlining the reconciliation of test results

Education

University of California, Los Angeles (UCLA)

March 2019

Bachelor of Science Electrical Engineering