

Job Title: Digital Signal Processing (DSP) Engineer – Summer Intern

Job Location: Warrenton, VA

Job Type: Internship

Job Description:

BCubed Engineering is seeking a highly motivated Digital Signal Processing (DSP) engineering intern in Warrenton, VA, working on design and implementation of software for DSP/SIGINT systems. All aspects of code design, implementation, testing, analysis, debugging. Languages used include C, C++, Python, Java, as well as GUI related technologies.

Key Responsibilities:

- Designing and implementing efficient algorithms and code for digital signal processing applications using C, C++, Python, Java, X-midas, and GNU Radio
- Conducting thorough testing and validation of DSP algorithms and software components to ensure robust performance
- Collaborating with cross-functional teams including hardware engineers, software developers, and system engineers to integrate DSP solutions into larger systems
- Documenting design specifications, implementation details, and test procedures for DSP software components
- Contributing to continuous improvement of DSP software development processes
- Supporting customer integration and troubleshooting efforts

Qualifications:

- Individuals pursuing a Bachelor's or Master's Degree in Electrical Engineering
- Demonstrated experience with C/C++, GNU Radio, X-MIDAS, Python, or JAVA within Unix/Linux programming environments
- Digital Signal Processing (DSP) background with strong understanding of communication systems design and theory
- Ability to hold a U.S. Security Clearance (US Citizenship Required)

About the Company:

BCubed Engineering Corporation is an employee-owned advanced software and engineering company with offices in Warrenton, VA and Tampa, FL. BCubed Engineering specializes in providing engineering solutions and hardware to meet a variety of unique mission needs to the DoD, IC, and commercial sector, through efficient implementation practices and leveraging cutting-edge COTS technologies. Areas of focus include Digital Signals Processing, Machine Learning, and Cloud/On-Premises computing architectures.

We Provide:

- Innovative and exciting work environment
- Mentorship with senior engineers for advanced career growth



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