

NORTHROP GRUMMAN



Company Background

Northrop Grumman Corporation is a leading global security company providing innovative systems, products and solutions to government and commercial customers worldwide, offering extraordinary portfolio of capabilities and technologies for applications from undersea to outer space and into cyberspace.

Northrop Grumman Mission Systems is a leading global provider, manufacture and integrator of advanced, secure and agile software-defined systems and solutions. Our differentiated C4ISR and cyber solutions deliver timely, mission-enabling information and provide superior situational awareness and understanding to protect the U.S. and its global allies.

Project Description

We are looking for students to work as a team to create a new image processing algorithm applications in C/C++ (and/or possibly Matlab). The algorithm designed will deal with streaming multi-frame resolution video while focusing on optimizing the performance. Students are expected to utilize a set of APIs (application processing interface) provided by Northrop Grumman's software engineering team. Testing sample data sets will be provided.

Team Information

We are looking for a team of 3 (possibly up to 4) students.

Students will be working on Colorado School of Mines campus. Students will be communicating with the Software Engineering team mainly through emails, conferences calls, and possible campus visits. Student may be expected to travel to the Northrop Grumman Corporation Boulder Location for presentations. Recommendations for future opportunities at Northrop Grumman Corporation are possible for students that show strong talents and performance.

Useful Skills

- Enjoy and/or interested in data processing
- Programming Languages:
 - C/C++
 - Java
 - MatLab
- Graphic and video processing and image manipulation
- Comfortable working in a Linux environment