Programmer/Analyst for Combat System Alignment

Black Knight Technology is looking for graduating students with computer science and mathematical backgrounds to conduct analytical, data science, and programming job duties for US Surface Navy support in the area of Combat System Alignment (CSA). CSA is the process of adjusting the pointing of sensor and weapon system elements to common reference points, lines, and planes, and maintaining them in this relationship. This is done by surveying ships with theodolites and laser trackers, converting the measurements into ship- and sensor-based coordinate systems, building the data into run-time files, and verifying the end result on site. Various organizations support this work; this task relates to support of the Program Office, which is the lead organization which funds, directs, oversees, and supervises all the other stakeholders in CSA for AEGIS DDG and CG Class ships.

This position is highly technical. Candidates will work with a Lead Black Knight System Engineer to identify and develop mathematical and software solutions to improve the effectiveness and efficiency of existing processes, and to identify ways to leverage new technology.

Tasking will include the following:
- develop software to read various binary files, organize them into a rational database, and apply pattern recognition and other techniques to find outliers in data
- Analyze algorithms and scripts used to convert surveyed data into ship specific values to assess correctness and suggest improvements
- Analyze data from surveys to assess computational quality
- Assess algorithms and analyze data for in-development future technology designed to improve the survey, computation, and application of CSA
- Organize and data mine historical alignment data to find trends specific to ship hulls and classes to develop a predictive function for alignment state
- Evaluate specifications, test plans, and code for the software that generates run-time files
- Design and develop test and analysis scripts/software to increase automation
- In general, develop software as needed to improve the accuracy and efficiency of all organizations within the CSA process

Work will be performed in our Fredericksburg office, with occasional trips to the DC and NJ areas. Eventually additional travel requirements may emerge. Selected candidates will have the opportunity to start work as a paid intern prior to graduation. A security clearance will eventually be required.

If interested, please forward your resume to Tim Davis (tdavis@bktech.com).

About Black Knight Technology

We are a small business that specializes in designing, testing, and analyzing leading-edge military systems for the US Navy. We are seeking top-tier candidates to join our small group of industry leading engineers in our ongoing efforts to design, develop, test, and analyze Surface Navy combat, weapon, and radar systems. We have highly technical positions open for motivated and independent thinking candidates who can apply modern engineering and software design techniques. As needed, employees will receive mentoring in combat systems and system engineering from our subject matter experts in all areas of combat system design, including weapons, command & control, sensors, communications, and tactical system architecture. Positions may require travel to provide onsite support of test and engineering efforts in labs and ship sites.

If you enjoy working with highly motivated people solving complex technical problems, the tasks that Black Knight Technology engineers and analysts work on will not disappoint you. We offer competitive salaries and a benefits package that is superior to our competitors. For more information, please visit our website (http://bktech.com).

Benefits/Compensation

Black Knight recognizes that the level of competence we are looking for requires aggressive compensation. We also aim to minimize turnover in a very competitive industry. For these reasons, Black Knight offers a compensation package which we feel stands out from others. We offer:

- A salary that is commensurate with the top levels of the industry
- A Simplified Employee Pension (SEP) in the employee's name, to which the company contributes an amount equivalent to 15% of the employee's annual salary (on top of salary, not in lieu of)
- A UL insurance policy in the employee's name of not less than $250,000
- Health and Dental coverage
- Flexible Spending Accounts for health and child care
- Bonuses based on Company Performance
- Base three weeks vacation and two weeks holiday annually
- As much work schedule flexibility as we can provide, in the form of flex-time, telecommuting, and/or off-hour schedules
- We are always looking for ways to improve and diversify our compensation package to support the evolving needs of all our employees.