Software, Sensor & Data Fusion Engineer 20-017

Fibertek, Inc. is a leading developer of laser and electro-optic systems for the aerospace community, with key contributions to lasers for atmospheric sensing, laser communications, and lidar sensors for NASA, DoD, and commercial customers. We are looking for a highly motivated individual to join our division at the Army Research Laboratory in Adelphi, MD to develop and maintain software based on new and novel algorithms for self-localization, geo-localization of other entities, collaborative multi-agent state estimation, and incorporation of time dissemination using a variety of sensors and mathematical frameworks such as stochastic filtering and bundle adjustment.

Your Job

The successful candidate will provide expert knowledge of: state estimation, controls and dynamics, information theory, networked and distributed sensing, time/frequency data analysis, data fusion, and classification, as well as extensive experience in software engineering of mature (i.e. deployable on flight vehicles) implementations of state estimation algorithms. You will join an agile small business that has a dedicated team of technology and business leaders with 35 years of success behind them. Your role will include:

- Implementation of theory from community research results such as GNSS position estimation and visual-inertial odometry,
- Integration of these implementations onto real embedded systems such as the Qualcomm Snapdragon family of devices and the NVIDIA Jetson Family of devices, and management of associated software.

Required Skills and Experience

- Bachelor's degree in STEM preferred.
- 5 Years' experience in field required.
- Must have techniques for modular software development for embedded devices, primarily in languages such as C/C++ and Python and middleware ecosystems including Robot Operating System (ROS).
- Must have experience and knowledge of open source libraries pertinent to this field, such as Ceres Solver and the Eigen library, and software lifecycle management tools such as Git.
- Must have the ability to be able to access and program the various peripheral devices available on embedded systems, such as digital signal processors, to affect efficient integration of algorithms.
- Good communication skills to discuss issues and potential solutions with other groups and personnel to find answers to a new problem set.
- MS Suite of office applications
- Good attention to detail and documentation
- Strong work ethic, positive attitude, self-starter, punctual and good attendance record with the desire to develop professionally
- Must have or be able to obtain a secret clearance
- US Citizenship required

Why Fibertek, Inc?

FIBERTEK, Inc. is a recognized leader in advanced lasers, lidars and laser communication systems providing our DoD, NASA and aerospace customers discriminating capabilities. We pride ourselves in our innovation and customer success focused culture enabled by a creative and relaxed work environment with minimal bureaucracy. Fibertek fosters a progressive learning environment that values inspiration, promotes professional challenge and encourages personal growth. We offer a competitive and incentivized compensation package with excellent benefits.

Fibertek, Inc. is an equal opportunity and affirmative action employer. Applicants are considered regardless of race, sex, disability, veteran status or any other protected characteristic in accordance with applicable law.