# SIL Position Description

**Position title:** Embedded Software Engineer

**Reports to:** Principal Engineer

### **Summary:**

This position is lead for real-time avionics and flight termination system embedded software

# **Responsibilities:**

- Develop real-time embedded avionics software architecture
- VxWorks real-time embedded avionics and flight termination system programming
- Embedded Software Design Assurance Software documentation
- Embedded Software electronics hardware in the loop end-to-end testing
- Write engineering documentation to meet customer software requirements

## **Required Competencies:**

## Experience

• 5-15 years of experience in the following areas: VxWorks programming, FPGA and Microcontroller embedded software engineering, and analysis and interpretation of physical phenomena or engineering data.

#### Technical Skills

- Proficient in all phases of engineering development (requirements, design, test and production)
- FPGA and Microcontroller (Atom, PIC, Atmel, etc.) and embedded software
- Real-time Operating Systems (VxWorks, Linux, etc.) running multiple digital I/O
- VxWorks embedded software programming in C/C++ for safety critical systems
- Familiar with AUTOSAR and MISRA C++ Guidelines for safety critical systems

#### Soft Skills

- Strong interpersonal skills
- Work in an engineering team to reach the next level of excellence
- Ability to write technical documents and procedures

#### Education

• B.S. Computer and/or Electrical Engineering (M.S. preferred)

## **Desired Competencies:**

#### Technical Skills

- FPGA and microcontroller embedded programming in C/C++ and assembly
- Experience with real-time embedded operating system and communication ports (RS-232/422/485, USB, CAN, Ethernet, etc.) connected to navigation (GPS Rx, INS, IMU, etc.) and environmental sensors
- Real-Time Operating System (VxWorks, QNX, etc) C/C++ programming
- Microsoft Office (Word, PPT, Excel, Visio and Sharepoint)

Full time position offers challenge and growth with excellent salary and benefits package including comprehensive <u>health insurance</u> benefits and 401K (4% match).

Resumes to: hr@spaceinformationlabs.com

## **Personal Requirements**

• Do you have an entrepreneurial spirit and desire to be part of an innovative team that designs and manufactures state-of-the-art avionics, power and small satellites. Put your skills to work and develop innovative products for Space launch vehicles and small satellites.

# **ITAR Requirements**

To conform to U.S. Government space technology export regulations, <u>applicant must be</u> <u>a U.S. citizen</u>, lawful permanent resident of the U.S., protected individual as defined by ITAR (22 CFR §120.15) or eligible to obtain the required authorizations from the U.S. Department of State.

SIL is committed to creating a diverse environment and is proud to be an equal opportunity employer. Each individual has the right to work in a professional environment that promotes equal employment opportunity and prohibits discriminatory practices, including harassment. All qualified applicants will receive consideration for employment without regard to race, color, religion, gender, gender identity or expression, sexual orientation, national origin, genetics, disability, age, or veteran status.

The SIL Full time position offers challenge and growth with excellent salary and benefits package including comprehensive health insurance benefits and 401-K

Salary Range based on experience: \$120,000 to \$145,000

Resume and Letters of reference to: hr@spaceinformationlabs.com