

## **EMBEDDED SOFTWARE DEVELOPER II/III**

Sensor Concepts, LLC is part of the Raptor Scientific Corporation, a global Aerospace & Defense test and measurement company with a focus on electronic and mechanical testing products and solutions. SCI specializes in radar cross section (RCS) measurements with emphasis on radar systems, data reduction, analysis, algorithm development and field measurements is looking for a motivated Embedded Software Engineer to join their talented team. Sensor Concepts is located off 580 and Greenville providing easy access to South Bay and Valley commuters. You can learn more about our company by visiting our website at: [www.sensorconcepts.com](http://www.sensorconcepts.com).

Position hours are Monday through Thursday 7:30 a.m. -5:00 p.m. and every other Friday 7:30 a.m. - 4:00 p.m.

### **POSITION HIGHLIGHTS**

This individual will support all aspects of embedded software development for radar systems, to include signal and data processing on embedded systems, design and implementation of interfaces, and porting algorithms to real-time targets. This individual will be part of a team of engineers who are responsible for design, development, integration, troubleshooting and support of electronic and embedded designs for our cutting edge radar measurement and analysis systems. This position is responsible for realizing creative solutions to electronic design problems given high-level requirements. Primary job functions include the design, code and test of embedded system software for FPGAs and microcontrollers as well as supporting software drivers. This individual must be creative with regard to improving the process, yet be disciplined when performing routine and repetitive tasks. This position offers an ideal opportunity to grow with the company.

### **RESPONSIBILITIES**

- HDL and embedded C development to support FPGA and microcontroller designs
- C# software drivers to communicate with embedded devices
- Implement radar timing, control and waveform generation on embedded systems, to include FPGA, PC host and other Embedded Processors.
- Design, implement, and optimize interfaces between PC host processor and embedded systems.
- Maintain scalable driver software architecture to support system diagnostics
- Creation of interface control documents.
- Design verification and testing.

### **REQUIREMENTS**

- 3-6 years of demonstrated experience in embedded software design, development and test of electronic systems and components
- Proven experience with VHDL, C, and RTOS programming of FPGAs and microcontrollers
- Experience with Xilinx Virtex FPGAs and Xilinx design tools
- Strong fundamentals in signal analysis, to include analog, digital, and RF waveforms
- Object oriented C# coding using Microsoft Visual Studio.

### **OTHER SKILLS:**

- Electrical design a plus.
- Familiarity with current generation of interfaces, to include Ethernet, RS-232, GPIB, USB, and SPI protocols.
- Ability to debug and communicate across disciplines.

- Experience in regulated design environment a plus - specifically, ISO/AS registered.
- Excellent verbal and written communication skills.
- Ability to prioritize in a dynamic environment.
- Ability to work independently and as part of a small team.
- Fluent with MS Office products, to include Outlook, Word, Excel, and Powerpoint.
- Physical ability to lift or assist in lifting large items up to 40 lbs.
- Ability to stand for up to 4 hours a day and/or sit, type and use mouse for up to 6 hours a day
- Flexible and adaptable to meet changing needs within the department.

## **EDUCATION**

This position requires a BS degree in Computer Engineering or related field as a minimum.

Please send resumes to: [recruiting@sensorconcepts.com](mailto:recruiting@sensorconcepts.com)

*Applicants selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information which includes US Citizenship.*

SCI is an affirmative action/ equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, marital status, national origin, ancestry, sex, sexual orientation, disability, medical condition, protected veteran status, age, citizenship, or any other characteristic protected by law.