Embedded systems and control engineer

Education Desired:

Bachelor's or Master's degree in Computer Science, Computer Engineering, Electrical Engineering, systems engineering or equivalent experience

Essential Job Functions:

Candidate will join a growing team developing next generation systems integrating high precision sensing technologies with advanced shock and vibration designs in a variety of applications under harsh environments. Job responsibilities include development of firmware and design and implement system software solutions to provide a high performance and robust embedded platform to application teams.

Perform on R&D projects in the development of MEMS-enabled electronic systems for next generation aerospace, automotive, and industrial applications. Develop Mathworks Simulink models for control (feedback, phase-locked loops, etc.) and I/O (audio, analog, RF, and digital). Transition Simulink models to embedded systems and standalone target hardware.

Experience Desired:

- Familiarity with Mathworks Simulink suite including Simulink Coder, State Flow, Simulink Real-Time, and related embedded products.
- Familiarity with Matlab and embedded systems related products, including HDL Coder, etc.
- Familiarity with Xilinx Zynq platform, Vivado development suite, and ZedBoard family of development boards and Mathworks specific target hardware such as Speedgoat systems.
- Related experience with DSPACE will be considered.
- General experience working with electronic systems in an ESD safe environment is a plus.

Knowledge Desired:

- Overall understanding of embedded systems, controller prototyping, and plant simulation models.
- Knowledge of best practices for Simulink project architecture.
- Knowledge of low-level hardware system languages such as Verilog/VHDL a plus.
- Knowledge with programming embedded systems in C/C++ a plus.
- Ability to interface above tools into Simulink platform a plus.
- Knowledge of embedded Linux operating systems a plus.
- Ability to diagnose and troubleshoot embedded systems on custom hardware platforms.

Essential Physical/Mental Requirements:

- Excellent written and oral communication skills
- Works independently to execute work plans, provide status updates and adjust to changing requirements.
- Strong documentation skills

Special Requirements:

U.S. citizenship or permanent resident status required.