



Systems Engineer

JOB # 443

Photo-Sonics, Inc. is an international leader in state-of-the art electro-mechanical and optical tracking systems located in Chatsworth, CA. We are an entrepreneurial company dating back to the early 20th century. Many innovations and successes in technology development happened here. As we grow our company and capabilities, we are seeking highly motivated and skilled professionals. You are invited to join our team, where you can express your ideas and make them happen. We are looking for engineers like you who wants to make a difference and help us elevate our technologies to the next level. Interested in knowing more about our opportunities, please see below:

The System Engineer will work closely with the Senior System Engineer & Technical Director to design and upgrade electro-mechanical and optical systems. This position works with a cross functional engineering team for all mechanical design engineering development and test activities.

Job Responsibilities include but not limited to:

- Perform system architecture, concept and requirements development
- Support system trade studies with team members
- Perform system level design development, integration and test
- Develop systems requirements (functional, performance) from Statement of Work (SOW)
- Decompose system level requirements to subsystems requirements with all engineering disciplines (mechanical, electrical, system/software)
- Design, develop and integrate system/operational/network software and firmware
- Develop interface control documents (ICDs)
- Perform project engineering duties (liaison between program office, operations and engineering)
- Develop compliance matrix, verification and validation plan, integration plan and design verification test (DVT) plan/procedure
- Perform system modeling and performance analysis
- Design and validate controls algorithm and software (in-house or working with outside vendor/subcontractor)
- Support in Failure Mode and Effects Analysis (FMEA) and provide resolution
- Support program technical interchange meetings (TIMs), design reviews and customer status meetings/questions
- Support in-house system integration, testing and range integration testing (system/network/operational software)
- Facilitate internal design reviews with engineering team (mechanical, electrical, system/software)
- Any other tasks assigned by management

Requirements:

- Position requires Bachelor's degree in Mechanical, Electrical, Systems Engineering with minimum of 5 years of systems engineering and design/development experience
- Master's degree in engineering a plus
- Preferred experience in aerospace, defense, automotive industry
- Requires knowledge across engineering disciplines (e.g., systems, electrical, electro-mechanical/controls and software)
- Knowledge or experienced with tracking systems, radar, sonar
- Optical electrical mechanical development background
- Knowledge of Optics, system calibration, timing
- Knowledge or experienced with gimbles, inertial measurement units, guidance systems
- Knowledge and experienced in the application and adaptation of Commercial-Off-the Shelf (COTS) products to meet government system requirements.
- Excellent presentation and communication (written and verbal) skills
- Applicant must be able to obtain Security Clearance.
- Preferred experience in servo control methods, electro optical system performance modeling, design and testing; as well as designing, using, procuring or analyzing visible and infrared focal planes or detectors.
- Cameras and optical sensors knowledge preferred
- Strong skills in mathematical algorithm design with experience in the use of design tools such as Matlab, Scilab or similar and able to perform complex mathematical and engineering calculation is desirable.
- Programming experience in C++ a plus
- Familiarity with databases is a plus.
- Prior experience with government contracts is desirable.
- Domestic travel will be required.

Affirmative Action/EOE