



TSC is an employee owned, high technology, small business engaged in providing engineering services to the U.S. Government and Industry. TSC's Systems Development and Production Division provides products and services in the areas of radar, communication systems, sensors, antennas and other electronics systems to the missile, radar/sensor system, communications, control systems, data acquisition, and signal processing markets. The company has developed products ranging from chip-level, application-specific, integrated circuits (ASIC) to complete, turnkey radar and communication systems. TSC has established a state-of-the-art hardware capability that is well respected by customers in Government and industry. TSC also provides full spectrum systems engineering support including theoretical analysis, requirements generation, interface control, and test planning/execution/data analysis.

TSC's Systems Development and Production Division in Huntsville, AL is currently looking to hire a Modeling and Simulation Engineer/Analyst with an educational and/or industry focus in the area of radars/sensors and sensor track filters.

Position Description: Modeling and Simulation Engineer/Analyst

Applicants must have a B.S. or M.S. (preferred) in Electrical Engineering from an accredited university along with at least 3 years of experience in radar performance analysis. Experience programming in C/C++ or other low-level language is required. Must be comfortable working in a disciplined environment where version control is expected. The ideal candidate should be technically motivated with the desire to pursue a technical career path.

Position will require:

- Collaboration with team of radar systems engineers to develop and maintain radar simulation during sensor concept, sensor development, and sensor test phase.
- Ability to create stand-alone performance analyses of mobile or stationary radar systems using Mathcad, MATLAB, or other computer algebra system.
- Experience implementing and tuning Kalman filters used to track threat in the sensor's observation space.
- Some familiarity with the following is desired:
 - Radar range equation
 - Signal-to-noise ratio (SNR)
 - Signal processing (matched filter, integration concepts, etc.)
 - Measurement accuracy prediction



- Detection fundamentals
 - Non-fluctuating targets
 - Fluctuating targets
- Clutter modeling
 - Distributed ground clutter
 - Volumetric rain clutter
 - Point clutter
- Glint modeling
 - Amplitude scintillation
 - Range and angle measurement degradation
- Must be able to effectively communicate the modeling and simulation approach taken to team of engineers and explain results.

Ideal candidate will possess excellent organizational skills, ability to prioritize work and maximize productivity. Candidate will be self-motivated and free-thinking individual capable of technical discussion, complex problem solving and scrutinizing prior assumptions. The candidate will have a personal interest in growing into a role of technical leadership.

Applicants must be U.S. citizens and will be required to obtain and maintain a security clearance.

TSC is an Equal Opportunity Employer. Qualified Veterans and Protected Class Candidates are encouraged to apply.

Send resumes to:
Employment-HSV@tsc.com