



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 Principal Systems Analyst with an educational and/or industry focus in the analysis and design of RF/microwave sensors and systems including but not limited to radars/sensors, missile seekers, and communications systems.

Position Description: Principal Systems Analyst

Applicants must have a PhD in electrical engineering or physics and 8-20 years of experience in industry. RF and microwave system experience is desired. Candidates must have a strong theoretical background and/or commensurate industry experience in one (or more) of the following areas:

- RF/Microwave System/Subsystem Test Equipment
- Electromagnetic Fields & Waves Theory and Analysis
- Track Filter Theory
- First Principles Derivation of Sensor and Antenna Performance
- Antenna & Antenna Array Theory & Analysis
- Radar & Communication System/Subsystem Analysis
- Radar & Communication System Signal Processing
- Statistical/Probability Analysis of System Data

Applicants need to have experience with MathCad and/or Matlab. Experience with Ansys HFSS is desired. Experience with other electromagnetic simulation software tools is also a plus.

Candidate shall have experience generating and presenting technical lectures. Applicant shall have experience developing white papers and analysis presenting



concepts and possible solutions to technical problems. Candidate will be expected to assist in generating technical proposal responses.

Common responsibilities will include the following activities:

- Serving as lead analyst on sensor development programs.
- Serving as a trusted customer interface for addressing technical questions and system performance theory.
- Custom printed antenna design, simulation, development and testing.
- Leading the development of detailed RF/microwave system and subsystem hardware architectures and concepts, including upfront analysis, trade studies, signal processing techniques, waveform selection, antenna design.
- Hands on lab testing of in house developed RF/microwave hardware. Common equipment used includes vector network analyzers, spectrum analyzers, signal generators, and anechoic chambers.
- Innovate new ways of addressing customer requirements.
- Using first principle derivations and proofs to guide system design decisions.
- Lead and mentor technical staff in radar, antenna, probability and signal processing theory
- Analysis of measured data from laboratory and/or field testing of in-house develop hardware and systems. Comparison of expected performance or truth data to actual measured performance.
- Development of technical presentations, white papers and proposals.

Ideal candidate will possess excellent organizational skills, ability to prioritize work and maximize productivity. Ideal candidate will be a self-motivated, free-thinking individual capable of technical discussion, complex problem solving and scrutinizing prior assumptions.

Applicants must be U.S. citizens and will be required to obtain 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