



**Technology Service Corporation**  
*an employee-owned company*

## **Modeling and Simulation Engineer/Analyst**

***Company Overview: Headquartered in Arlington, Virginia, TSC is an employee-owned company that has been providing high-quality technical services and solutions for our customers' for over 50 years. Our diverse portfolio includes providing full lifecycle support in Precision Strike And Area Effects; Area Protection; Airborne Sensors and Intelligence, Surveillance, and Reconnaissance (ISR); Vehicle Protection; Electronic Warfare Systems; Air And Missile Defense; Space Systems, and Intelligence and Information Systems. TSC offers a professional working environment, a competitive salary, and an excellent benefits package. Come and join our team!***

### **TSC Operation Highlights**

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.

### **Job Description:**

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.

### **Responsibilities:**

- 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.

## **Qualifications**

### **Required Qualifications:**

- B.S. in Electrical Engineering
- 3 years of experience in radar performance analysis
- Experience programming in C/C++ or other low-level language
- Comfortable working in a disciplined environment where version control is expected

### **Preferred Qualifications:**

- M.S. in Electrical Engineering
- Technically motivated with the desire to pursue a technical career path
- Excellent organizational skills, ability to prioritize work and maximize productivity
- Self-motivated and free-thinking individual
- Capable of technical discussion, complex problem solving and scrutinizing prior assumptions
- Should have a personal interest in growing into a role of technical leadership

**U.S. Citizenship Required:** Yes

**Security Clearance Required:** Yes, will be required to obtain and maintain a security clearance

**Travel:** No

**Relocation Assistance Available:** Yes

**Position Contingent Upon Award of Contract:** No

### **TSC Benefits:**

TSC offers a stable work environment, a competitive salary and a comprehensive benefits package; including ESOP contributions, 401k Matching Program, Flexible Work Schedules, Tuition Reimbursement, Paid Leave and much more.

### **Applying to TSC:**

Only those candidates invited for an interview will be contacted. Employment at TSC is contingent upon the successful completion of a comprehensive background check, security investigation, and a drug screening.

**TSC is committed to hiring and retaining a diverse workforce. We are proud to be an Equal Opportunity Employer/Affirmative Action Employer, making decisions without regard to race, color, religion, creed, sex, sexual orientation, gender identity, marital status, national origin, age, veteran status, disability or any other protected class.**