

Member of the Technical Staff - Systems & Technology Research (STR)

We seek masters, PhD, and post-doc candidates in electrical engineering, physics, mathematics, computer science or related fields for full time positions. New staff join dynamic teams solving challenging research problems, developing concepts for new projects and programs, and creating impactful solutions for our customers.

Systems & Technology Research (STR) is a small company focused on providing innovative technology-based solutions to defense, intelligence and homeland security problems. STR's staff are experienced in solving problems related to sensor design, command and control, machine learning, computer vision, video and media processing, social media processing, navigation and tracking, data analytics, systems analysis and software engineering. We are seeking qualified applicants for full-time positions in our Woburn, MA facility.

STR is an exciting place to work - staff work on all phases of projects - problem design, solution discovery, development of prototype algorithms and systems in software and/or hardware, experimentation and data analysis, and system implementation for tests and fielded systems. Our staff experience a diversity of roles on multiple assignments - we work together on multidisciplinary teams from project beginning to end. We solve challenging problems as a team and we have fun doing it. While working on advanced research problems our staff collaborate directly with co-contractors and customers, developing valuable skillsets beyond just engineering - teaming and communications skills can be as important as our science skills.

We offer a competitive compensation package including 401(k), profit sharing, health and welfare benefits, and a casual yet technically challenging work environment. Join our dynamic entrepreneurial team and become part of our fast growing company and share in our continuing success.

Applicants must be US Citizens and able to obtain a security clearance.

Qualifications: Current requisitions are listed below. Our needs evolve as we win new programs, so while these requisitions are examples of open positions, we look forward to discussing opportunities with outstanding candidates with skills and interests beyond what are listed here.

Title: FPGA Design Engineer

Description: Design, implement, and test real-time signal processing algorithms in field programmable gate arrays (FPGAs).

Qualifications: A bachelors or masters degree in electrical engineering, physics, mathematics or a related field. Candidate should have strong working knowledge of current industry design tools and processes including RTL (e.g. Verilog), ModelSim, MATLAB, and leading devices including those from Altera and Xilinx.

Title: RF Sensor Systems Engineer

Description: Develop models, hardware and conduct system analysis for RF-based sensor and communications systems including radars, distributed mobile communications systems and electronic and signals intelligence systems (ELINT/SIGNIT). Familiarity with component technology performance characteristics, RF propagation modeling, and experience designing, integrating and testing RF sensor and/or communication systems is desirable. Work with measured sensor data to develop system models and conduct performance analyses and design tradeoffs, and research new sensing and processing concepts.

Qualifications: A bachelors, masters, or PhD degree in electrical engineering, physics, mathematics or a related field. Positions available at all levels of academic accomplishment and industry experience. Candidate should have strong scientific programming skills in MATLAB/Simulink and/or C/C++.

Title: Signal Processing Engineer

Description: Develop advanced algorithms for RF array signal processing, detection and parameter estimation. Work with measured sensor data to evaluate and innovate algorithmic approaches. Contribute to new research concepts.

Qualifications: A bachelors, masters, or PhD degree in electrical engineering, physics, mathematics or a related field. Positions available at all levels of academic accomplishment and industry experience. Candidate should have strong scientific programming skills in MATLAB, Python, JAVA, and/or C/C++.

Title: Machine Learning Engineer and Computer Vision

Description: Develop advanced algorithms for exploiting sensor data using advanced statistical machine learning techniques involving graphical models, estimation and control of dynamical systems. Work with measured sensor data and develop simulation capabilities to evaluate and innovate algorithmic approaches. Contribute to new research concepts.

Qualifications: A bachelors, masters, or PhD degree in electrical engineering, computer science, physics, mathematics or a related field. Positions available at all levels of academic accomplishment and industry experience. Candidate should have strong scientific programming skills in MATLAB, Python, JAVA, and/or C/C++.