



## GRADUATE RESEARCH ASSISTANTS WANTED

The Electronic Systems Laboratory (ELSYS) and the Sensors and Electromagnetic Applications Laboratory (SEAL) of the Georgia Tech Research Institute (GTRI) are seeking one or more GRAs to work in the areas of modern target tracking, precision geolocation, and communications signal processing. **All openings require US Citizenship** and have the potential to lead to full-time employment.

**Modern Target Tracking** involves the processing of sensor measurements for the estimation of the kinematic states (e.g. position, velocity, acceleration) of maneuvering targets. Potential topics of investigation include the tracking of closely spaced objects, tracking maneuvering targets with multiple sensors, tracking maneuvering targets in the presence of sea-surface induced multipath, multisensor resource allocation, and integration of tracking and signal processing for sensor control. The candidate will be involved with a team of research engineers developing a target tracking capability within GTRI. The candidate should have a background in random processes and an interest in estimation theory and Kalman filtering, signal processing, and Matlab. Knowledge of radar signal processing is desired, but not required.

**Precision Geolocation** involves processing received signals from spatially separated, moving, networked passive sensors to estimate the location of multiple ground-based emitters. The candidate should have a background in random processes and an interest in estimation theory and Kalman filtering, signal processing, and Matlab. Knowledge of radar signal processing is desired, but not required.

**Communications Signal Processing** involves separating/discriminating desired radar signals from wideband spread-spectrum and other commercial communication signals. The successful candidate will work with a VME-based digital receiver system that includes RF downconversion digital sampling and potentially realtime processing. The candidate should have a background in random processes and an interest in estimation theory, signal processing, and Matlab. Knowledge of radar signal processing is desired, but not required.

For Further Information, Contact:

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