

## **Search for a Post-Doc Fellow to Work on Communication Systems and Sensing**

**The broad discipline of the candidate** – Electrical Engineering, System Engineering, Computer Engineering or Applied Physics.

**The specializations and competencies required** – Wireless Communications, Networking, Signal processing, Acoustics and Sonar, Localization, Radar and Remote Sensing, Optical Communications and Sensing.

### **Job Description**

The mission of the Center for Communications Systems and Sensing is to advance knowledge in the areas of wireless communications, localization, acoustic and ultrasound sensing, radar systems, and optical communications and sensing, and to facilitate the transformation of this knowledge into commercial innovations. This mission is achieved through modeling, simulation, and experimental analysis of these communication and sensing systems.

### **Job Responsibility**

- I. Design, modeling, and characterization of communication systems/ sensors
- II. Simulation, and experimental analysis
- III. Mentorship of Ph.D., M.Sc., and/or B.Sc. students
- IV. Data analyses, interpretation and reporting

### **Desired Requirements:**

In addition to the general postdoc competencies related to excellent speaking , writing, communications and research skills, ability to develop and implement new research ideas, and to design and perform advanced experiments, all or some of the following discipline-specific competencies are needed:

- 1) Strong technical background on communication systems and sensing
- 2) Statistical analysis capabilities
- 3) Excellent signal processing skills
- 4) Hands on experience on machine learning applied to communications and sensing
- 5) Programming skills (MATLAB, Mobile programming)
- 6) Software defined radio
- 7) Photonics and Optical communication and sensing