

Postdoc or Research Scientist in Theoretical and Computational Acoustics

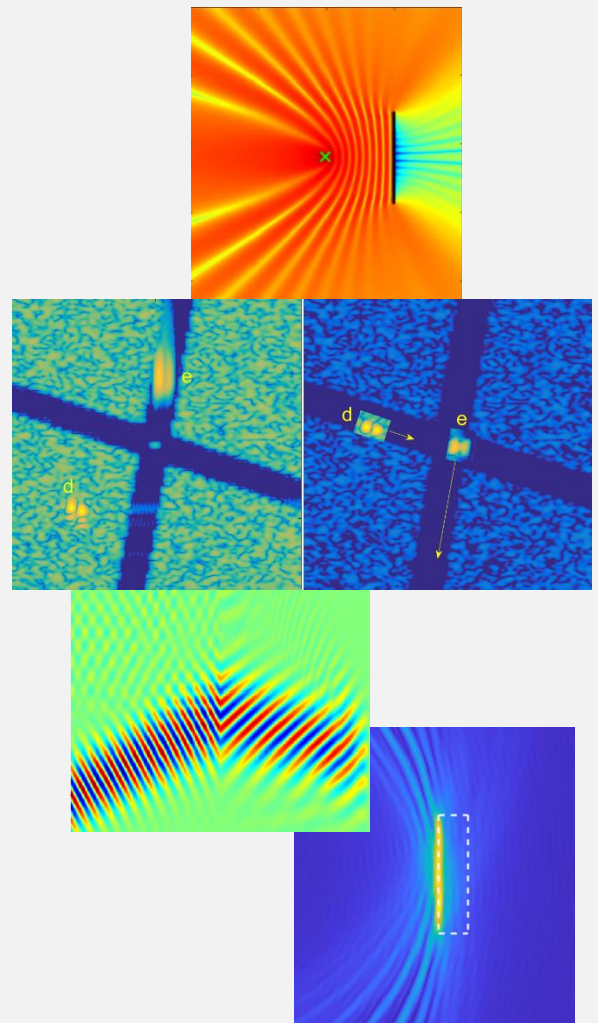
Faculty of Engineering, Tel Aviv University, Israel

For a new project in collaboration with industry, it is required to develop and numerically implement advanced algorithms for acoustic wave scattering, acoustic imaging, acoustic cloaking, and various forms of acoustic wave control. The role involves working with real-time simulations in two- and three-dimensional domains.

Required Skills

The candidate is expected to be well acquainted with two and three-dimensional acoustic and/or electromagnetic wave propagation theory, in particular scattering calculations and imaging, as well as to be able realizing the algorithms in numerical simulations. Specifically, knowledge and experience are sought in the following fields:

- Target Echo Strength (TES) and/or Radar Cross Section (RCS) computations
- Geometrical/Physical optics
- Near Field imaging
- Scientific Computation (Integral equation-based methods, Finite Difference Time and Frequency Domain methods, or similar)
- Software: MATLAB, Python, Fortran, or similar
- Control Theory – advantage
- Radar/Sonar simulation – advantage



Required Education

PhD in Electrical Engineering, Mechanical Engineering, Applied Mathematics, or Physics.

- ✓ Full-time job
- ✓ Start date is flexible; position will commence upon hiring of the suitable candidate
- ✓ Prospects for long-term employment

To apply, please send your resume and a concise cover letter to:

Dr. Lea Beilkin leabeilkin@tau.ac.il , Prof. Amir Boag boag@tau.ac.il