POSTDOCTORAL OPENING IN RADAR INVERSE PROBLEMS

It is anticipated that a postdoctoral position in the area of radar inverse problems will be available in the Department of Electrical and Computer Engineering at Northeastern University in Boston MA USA starting in mid-summer of 2006. The ideal candidate will have a PhD in an area such as physics, applied mathematics, or electrical engineering, with experience in algorithms development for imaging/inverse problems.

The goal of the research project is the development and validation of methods for imaging the internal structure of a building based on observations of scattered electromagnetic fields collected about the building’s periphery. Hybrid, tomographic processing methods employing both ray-tracing as well as diffusive forward models are to be developed for identifying the overall layout of the building (i.e. size and shapes of rooms) as well as providing more fine-scale information concerning the location and movement of individuals within the structure. Finally, information-theoretic methods will be developed to address issues such as design of the data collections to maximize the information content of the observations with respect to the underlying processing objective.

The project involves a team of researchers in addition to Prof. Miller. It is anticipated that this particular position will involve close collaboration with

- Prof. Misha Kilmer, Dept. of Mathematics, Tufts University, http://www.tufts.edu/~mkilme01/

The project will last for up to 30 months. Appointment for this job will be on a year-by-year basis.

For more information about this position, please contact

Prof. Eric Miller
Dept. of Electrical and Computer Engineering
315 Stearns Center
Northeastern University
360 Huntington Ave
Boston MA, 02115
email: elmiller@ece.neu.edu
Web: http://www.ece.neu.edu/faculty/elmiller/elmhome/

Interested candidates should provide (preferably via email) Prof. Miller with a copy of their CV, list of references, and copies of relevant articles, theses, technical reports etc.

Northeastern University is an Equal Opportunity/Affirmative Action, Title IX, educational institution and employer and particularly welcomes applications from minorities, women and persons with disabilities. Go to www.neu.edu/hrm for more information.