

Postdoctoral Fellowship, Speech Processing in Noise

University of Connecticut Health

Location: Farmington, CT

Start Date: January 2020, or thereafter

Duration: Initially 1 year with potential for extension

Salary: Depends on experience, based on NIH range: benefits include health care, retirement contributions, and paid leave for vacation, personal days, holidays and sickness.

Application Process: Please send your resumé, a one-page cover letter that describes your research interests and experience, a list of publications (copies of most relevant - optional), and contact information for three references to Dr Insoo Kim (ikim@uchc.edu).

A Postdoctoral Fellowship is available in the Division of Occupational Medicine, Department of Medicine, at the University of Connecticut Health to investigate algorithms for improving speech intelligibility in environmental noise. The work will involve simulating the noise of machines from known frequency spectra and creating speech-in-noise test files using MATLAB for replaying to subjects in listening tests. The test files may be processed electronically to improve intelligibility before the psychoacoustic testing. The position requires knowledge of, and practical experience with, speech or audio digital signal processing; proficiency with MATLAB and Simulink simulations, and; familiarity with psychoacoustic testing of speech intelligibility in noise, and with the development of embedded systems or digital signal processors.

The Fellow will participate in on-going research projects involving speech processing. He/she will be responsible for implementing the algorithms for improving speech communication in noise, conducting all psychoacoustic tests used to establish proof-of-concept, and data analysis and interpretation. The Fellow will also have opportunities to supervise graduate and undergraduate students.

Candidates should have good oral and written English communication skills, be capable of independent work as a part of a multi-disciplinary team, be able to work on multiple projects at the same time, publish results in academic journals and participate in grant proposal preparation. They should have a Ph.D. degree in Acoustics, Electrical, Computer, Biomedical Engineering, or a related field with appropriate experience. The initial appointment is for a period of one year with potential for further extension. The review of applications will start immediately and will continue until the position is filled.