Post-doctoral researcher (12 months): Speech in noise confusions

Language and Speech Laboratory, University of the Basque Country

Starting date: 1st October 2012
Closing date for applications: 15 April 2012

The INSPIRE Marie Curie Initial Training Network

As a postdoc, you will participate in the FP7 Marie Curie Initial Training Network Investigating Speech Processing In Realistic Environments (INSPIRE). This network provides research opportunities for 13 PhD students and 3 postdocs. You will become a member of an international team of researchers whose aim is to gain a better understanding of how listeners recognize speech under non-ideal circumstances. You will contribute to urgently needed solutions that help alleviate the serious communication problems that arise, especially for older and hearing-impaired persons, when different combinations of ‘adverse’ conditions affect the speech processing system.

Topic

As a postdoc you will work with other network researchers in the collection, analysis and distribution of a corpus of “high-interest” speech-in-noise tokens. Noisy speech tokens that are misheard in a consistent manner by the majority of listeners are highly valuable as test cases for microscopic models of intelligibility. Collection of a corpus of such consistent confusions will require the screening of a very large number of noisy tokens by many listeners. The project will make use of efficient web-based speech perception testing software and will generate the publicity needed to encourage many thousands of listeners to participate. The corpus will serve as the basis for the evaluation of microscopic models throughout the duration of the project, and will provide an ongoing resource for the INSPIRE network. Since the collection will be carried out using speech material in multiple languages and with listeners with multiple first languages, it offers the potential of studies employing cross-linguistic comparisons.

Host

The project will be carried out at the Language and Speech Laboratory (LASLAB, http://laslab.org) at the University of the Basque Country, Spain. LASLAB is a multidisciplinary group of linguists and engineers within the Faculty of Letters focusing on speech perception by listeners and machines, especially in multilingual settings. You will also have an opportunity to spend some time at the second host, the Speech and Hearing Group (http://spandh.dcs.shef.ac.uk/) in the Department of Computer Science at the University of Sheffield, UK under the supervision of Dr Jon Barker, as well as at other sites within the INSPIRE network.

Employment conditions

• full-time, 12 months duration

• the annual salary is €44604 before taxes

• in addition to the salary, you will receive travel and training allowances on the basis of generous Marie Curie ITN provisions
Requirements

You should

- hold a technical PhD in speech or hearing
- have a strong background in some of the following: computer science, signal processing, machine learning, mathematical and/or statistical modelling
- have excellent programming skills
- be available to start on 1st October 2012

You must also comply with the FP7 Marie Curie rules for ITNs:

- not have resided or performed your main research activity in Spain for more than 12 months in the last three years
- be willing to work in at least one other country in the INSPIRE network
- have fewer than 5 years of total research experience, including the time you spent on your PhD

The University of the Basque Country is an equal opportunity employer. Female researchers are strongly encouraged to apply for this vacancy.

To find out more

Further information about INSPIRE can be found at
http://www.ru.nl/clst/projects/speech/inspire/
or contact Prof. Martin Cooke, m.cooke@ikerbasque.org

How to apply

Your application must consist of

- a CV
- a 2-page description of your research interests explaining why the INSPIRE goals appeal to you, how the INSPIRE team may benefit from your participation, and your career perspectives as expected from INSPIRE
- university transcripts
- names and email addresses of two referees that we will contact

Please send your application, stating vacancy code INSPIRE-ER-UPV, to m.cooke@ikerbasque.org before 15 April 2012.