

## Job Description

Institute for Scientific Interchange(ISI) is seeking to appoint a highly motivated Post-doctoral Assistant to undertake research activities related to signal processing and machine learning for the understanding of human behavior through biosignals (EEG, EDA, etc.) within the scopes of the Horizon2020-funded project Sound Of Vision.

*Sound of Vision (Natural sense of vision through acoustics and haptics) is a highly multidisciplinary project that designs, implements and validates an original non-invasive, wearable hardware and software system to assist visually impaired people by creating and conveying an auditory representation of the surrounding environment, helping them to both perceive and navigate in any kind of environment (indoor/outdoor). ISI is responsible for conducting usability studies to validate the functionalities of the prototype and access the users' experience.*

### Specifically you will:

- ✓ Design and conduct usability studies combining behavioural, neuroscientific and psychophysiological methods.
- ✓ Assess the cognitive load and emotional states of the participants while using the system, employing multimodal data fusion and machine learning techniques;
- ✓ Carry out innovative, impactful research in the areas of: Behavioral Understanding, Machine Learning and Human Computer Interaction;
- ✓ Produce high quality scientific and technical outputs including journal articles, conference papers and presentations, patents and technical reports.

### Core skills you will need for this position:

Ph.D in Computer Science, Computer Engineering, Machine Learning, Bioinformatics, Statistics or a related quantitative field.

- ✓ Applicants should have an established publication record in the fields of signal processing and machine learning.
- ✓ Have strong programming skills in at least one of the following languages Matlab, Python or Java.
- ✓ Solid knowledge of statistics and hypothesis testing.
- ✓ Experience with EEG and EDA signal processing as well as usability experimental design will be highly appreciated.
- ✓ Experience with mobile application development is considered a plus.
- ✓ Fluency in English both spoken and written.

### ISI offers:

We provide an unusually rich opportunity for collegial interaction in a highly competitive environment. Mentoring will be provided by a multidisciplinary faculty team including co-investigators on the project and collaborators from neurology, engineering and psychology. We provide a competitive salary according to the qualifications and medical and pension benefits according to the Italian State. Applications received before the February 1<sup>st</sup> 2016 will be given priority, but the position will remain open until filled. The successful applicant is expected to start the appointment approximately

on April 2016. The appointment is until January 2018. To apply, send cover letter, curriculum vitae and professional reference list to the PI of the project **Dr. Kyriaki Kalimeri** < *kyriaki.kalimeri@isi.it* >. For any further information, please refer to Dr. Kyriaki Kalimeri or Dr. Charalampos Saitis < *charalampos.saitis@isi.it* >.

ISI is an equal opportunity employer and does not discriminate on the basis of race, color, national origin, gender, sexual orientation, age, religion or disability.