

PostDoctoral Research Position at the University of Edinburgh in Biomedical Signal Processing



THE UNIVERSITY
of EDINBURGH

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We are looking for an enthusiastic and strongly motivated researcher to join our group within the Institute for Digital Communications in the School of Engineering. You will work in an EPSRC-funded project on the creation of new analysis techniques based on tensor factorisations for dynamic brain connectivity data.

You will have the opportunity to collaborate with interdisciplinary partners to develop advanced signal processing techniques for connectivity analysis and further our understanding of how Alzheimer's disease affects the brain electrophysiological activity. The main objective of the project is to create a novel framework based on tensor factorisations to investigate the components of dynamic networks resulting from electroencephalogram functional connectivity. This will include the introduction of appropriate constraints in the factorisations, and methods to compare them across subjects.

You should hold (or be about to receive) a PhD in signal processing, computer science, or a related numerate discipline. Experience in biomedical signal processing and/or brain connectivity analysis will be considered a plus. A good track record of international publications demonstrating prior experience is required. You should have good programming skills, a strong mathematical background, and an interest in interdisciplinary research.

This post is full time and fixed term for 13 months, to commence in April 2016 or as soon as possible thereafter.

The University of Edinburgh is considered one of the top universities in the world according to recent rankings. The Institute for Digital Communications, in the School of Engineering, develops theory, algorithms and hardware for the next generation of signal processing, imaging and communication systems. The Institute comprises 15 faculty members and over 65 research fellows/associates and over PhD students. In REF2014, Engineering had 94% of the overall research activity ranked as world-leading or internationally excellent.

Edinburgh, the capital of Scotland, offers a vibrant professional life, excellent career opportunities and a very high quality of life. It has a beautiful old part, has an abundance of café's, restaurants and bars, and yearly hosts the Festival and the Fringe, which is the largest arts gathering in the world.

Interested candidates should email the Principal Investigator (Dr Javier Escudero, javier.escudero@ed.ac.uk) with an updated CV and a brief summary of interests.