



Learning to see: How do social scientists learn to interpret fMRI? ESRC DTP Collaborative Studentship

University of Nottingham and Ilixa Ltd.

The Midlands Graduate School is an accredited Economic and Social Research Council (ESRC) Doctoral Training Partnership (DTP). One of 14 such partnerships in the UK, the Midlands Graduate School is a collaboration between the University of Warwick, Aston University, University of Birmingham, University of Leicester, Loughborough University and the University of Nottingham.

The University of Nottingham as part of Midlands Graduate School is now inviting applications for an ESRC Doctoral Studentship in association with our collaborative partner, Ilixa Ltd., to commence in October 2019.

In this project, we aim to understand how social scientists learn to understand functional Magnetic Resonance Imaging (fMRI) maps. This PhD therefore offers an exciting opportunity to research a topic at the intersection of Psychology, Education and Neuroscience and that addresses an issue of growing importance.

Put simply we know that the use of fMRI is increasing but that we don't know how students, researchers and lecturers come to understand its complex form. The images are presented often as striking photographs but these maps are complex representations whose interpretation is demanding and whose form differs fundamentally from other visualizations.

Understanding what makes experts successful and the difficulties faced by novices will be crucial to developing best practice for the teaching of fMRI interpretation and in the design of new tools and this PhD will be able to contribute to both goals.

The project will involve analysing curricula in Higher Education (textbook analysis, interviews with students and their lecturers). Then, we will recruit experts and novices, and study how they interpret fMRI maps presented to them on an online viewer using methods such as eye tracking and protocol analysis.

The selected candidate will benefit from experienced multi-disciplinary supervisors with complementary expertise, and from opportunities for additional training through both Psychology and Education in methods and theory. They will also benefit from Ilixa Ltd.'s links with the image analysis community and their insight into the commercial applications of research.

We are looking for candidates with a good fit to the topic and methods, (e.g. a background in Psychology or Cognitive Science/Neuroscience). However, as with all interdisciplinary PhDs it is unlikely that applicants will have background knowledge in all areas so we are looking for someone with the enthusiasm to learn new skills and techniques. You will need a strong 2i as minimum to be

considered and the eventual award may be made as 1+3/3.5/+3 dependent on prior qualifications and training.

Application Process

To be considered for this PhD, please complete the Collaborative Studentship application form [available online here](#), provide a CV, along with two references email this to Chris Naylor (email: SS-PGR-JC@exmail.nottingham.ac.uk).

Application deadline: Wednesday 24th April 2019

Midlands Graduate School ESRC DTP

Our ESRC studentships cover fees and maintenance stipend and extensive support for research training, as well as research activity support grants. Support is available only to successful applicants who fulfil eligibility criteria. To check your eligibility, visit:

www.mgsdtp.ac.uk/studentships/eligibility/

Informal enquiries about the research prior to application can be directed to

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