PhD Studentship in Big Data Analytics

Applications are invited for a Challenge Fund PhD studentship tenable in the Faculty of Computing & Engineering at the Jordanstown Campus.

Project Summary

Thanks to the rapid development of computing and sensing technologies, we are entering the era of big data characterised by vast volume, high velocity of generation, and great variety and complexity. While the emergence of big data brings appealing opportunities and has potential to provide profound insights into a number of areas including health care, medical and social sciences, it poses great challenge to conventional computing environments and data analysis approaches, not only because of the ever-increasing data size but also due to the heterogeneous nature of data with timeliness requirements.

This project aims to advance data fusion, machine learning and data mining algorithms for processing big data. It is expected that the proposed platform, methods and tools will be tested on the datasets related to three recently funded EU Horizon 2020 projects: (1) mHealth4Afrika: Community-based ICT for Maternal Healthcare in Africa; (2) MetaPlat: Development of an Easy-to-use Metagenomics Platform for Agricultural Science; and (3) SenseCare: Sensor Enabled Affective Computing for Enhancing Medical Care. It is envisaged that inter-disciplinary, inter-institutional and industrial collaborations provided by the three consortiums will support the development of this project.

Entrance Requirements

Candidates should hold, or expect to hold a First or Upper Second Class Honours Degree in Computer Science or a related area. It would be beneficial if candidates hold an MSc in Computer Science or a related area with particular relevance to topics such as Big Data Analytics, Machine Learning, Computational Intelligence or Cloud Technologies. Applications will be considered on a competitive basis with regard to the candidate's qualifications, skills and experience. The successful candidate will enroll as soon as possible, on a full-time programme of research studies leading to the award of the degree of Doctor of Philosophy.

The studentship will comprise fees (Home/EU and Overseas) and an annual stipend of £14,057. It will be awarded for a period of up to three years subject to satisfactory annual progress. During the lifetime of the project there will be opportunities to spend period of secondments to some other partners involved in MetaPlat and SenseCare projects. Arrangements for the secondments will be made by the supervisory team of the PhD project in conjunction with partners involved, subject to satisfactory student academic performance on the project.

If you wish to discuss your proposal or receive advice on this project please contact:
Dr. Huiru (Jane) Zheng (h.zheng@ulster.ac.uk).

Procedure

For more information on applying go to ulster.ac.uk/research
Apply online ulster.ac.uk/applyonline

The closing date for receipt of completed applications is 15 January 2016

Interviews will be held late January 2016