

PhD Project Proposal
ECIT Interdisciplinary PhD Programme

Proposed Project Title: Data exploration of food security relationships

**Principal Supervisor(s): Prof Roger Woods
Prof Chris Elliot (IGFS)**

Project Description:

The production of food is becoming a critical issue for the future of mankind and various damning forecasts have been predicted for our ability to be able to feed the growing population. A number of issues come to mind related around food including food security and also the condition of the environment, particularly optimising the nutrient utilisation in soil to be able to effectively grow the future generations of plants.

The purpose of this project is to look to applying advanced data analytics and developing dashboards to allow visualisations and detection of relationships not previously available this will build on initial work undertaken between IGFS and Analytics Engines under the food Fortress project which has shown the geographical relationship between reported incidents and countries of origin based on available data. A detailed plan of objectives will be developed.

Objectives:

Academic Requirements:

Students entering the programme will normally be required to have a 2.1 BSc/BEng in Computer Science, Electrical and Electronic Engineering, Bioinformatics, or a maths based engineering or physical science degree, or equivalent qualification recognised by the University. Students holding an appropriate MEng or MSc (Software conversion) will normally be required to have a 2.1 or commendation (distinction) respectively. Furthermore, additional criteria may be applied. All applicants must have significant mathematical and programming experience.

GENERAL INFORMATION:

This 4 year PhD studentship, potentially funded by the Department for Employment and Learning (DEL), commences on 1 October 2019.

Eligibility for both fees and maintenance depends on the applicants being either an ordinary UK resident or those EU residents who have lived permanently in the UK for the 3 years immediately preceding the start of the studentship. Non UK residents who hold EU residency may also apply but if successful may receive fees only.

Applicants should apply electronically through the Queen's online application portal at: <https://dap.qub.ac.uk/portal/>

Deadline for applications: Friday 1 March 2019

Contact details:

Supervisor Name:
QUB Address:

Tel: +44 (0)28 9097
Email: