

PhD Studentship

Smart Technology Research Centre / Computational Intelligence Research Group

School of Design, Engineering and Computing, Bournemouth University, United Kingdom

Applications are invited for a 3 year, fully funded PhD research studentship to work on a project entitled "**Data Pre-processing and Predictive Modelling for the Development of Adaptive Soft Sensors**". This project, while fully funded by the Bournemouth University, will be executed in the framework of a large EU funded INFER project (www.infer.eu).

The research conducted in this project will deal with the identification, development and research of new pre-processing and predictive techniques driven specifically by the process industry requirements though applicable in the general INFER platform context. For the application of the platform as a soft sensor, the research will focus on: i) robust on-line methods for advanced feature selection, de-noising, and outlier detection; ii) development of techniques for automatic selection of training, re-training, re-calibration, and validation (supervisory) data; iii) development of new methods for automated on-line treatment of corrupt and missing data; iv) study of the quality of the on-line models; and v) tests and validation of new methods.

The student will be joining the Computational Intelligence Research Group within the Smart Technology Research Centre and will be primarily based in the School of Design, Engineering & Computing in Bournemouth but will also be required to frequently visit and work at our commercial partners' labs (REC in Poland and Evonik Industries in Germany) providing an outstanding opportunity to gain a diverse experience of both academic and commercial environments.

The studentship carries a basic remuneration of £13800 pa tax-free and a waiver of the full-time research student fee. There are no restrictions on the nationality of the applicants and the selection will be based on the candidate's qualifications and experience.

Applicants should have a very strong mathematical background and hold a first or upper second class honours degree or equivalent in computer science, mathematics, physics, engineering, statistics or a similar discipline. Additionally the candidate should have strong programming experience using any or combination of C++, Matlab or Java.

For further details please contact Prof Bogdan Gabrys, e-mail: bgabrys@bournemouth.ac.uk or visit the following www pages: http://dec.bournemouth.ac.uk/staff/bgabrys/PhD_Studentships_2011.html.

Interested candidates should follow the application procedure listed on the Bournemouth University web pages: http://www.bournemouth.ac.uk/research/studentships/how_to_apply.html. Further details concerning the studentship and application procedure can be also obtained from the Graduate School Manager - Dr Fiona Knight, Email: graduateschool@bournemouth.ac.uk.