



KTP Associate - Applied Machine Learning

Salary: up to £27,900 per annum

Closing date: 22 March 2013

Reference: D1181R

You will work on the application of cutting edge machine learning and computational intelligence methods to real world industrial problems. In particular, we are interested in the combined use of support vector machines and unsupervised clustering methods to analyse high dimensional heterogeneous industrial data. The aim of the analysis is to improve the precision of the manufacturing process of printed circuit boards. The only company in the world that offers a fully automated solution to this problem is the XACT PCB Ltd based near Newcastle in the North East of England. The size of the market of printed circuit boards is in the range of billions of dollars. You can have a real impact on how printed circuit boards are made by joining this project.

The project is a collaboration between the XACT PCB Ltd and Newcastle University. You will work most of the time at the offices of the company and every week you will spend at least a half day at the School of Computing Science of Newcastle University where you will also have an office place. The School of Computing Science recently expanded its academic staff with interests in applied machine learning and computational intelligence. Ongoing research includes the analysis of human behavioural data recorded by movement sensors, development of intelligent and adaptive living environments, data mining of bioinformatics databases, analysis of neuroinformatics imaging data, optimisation of gene regulation for synthetic biology, and experimental validation of cyber-physical systems. You will work under the supervision of Dr Peter Andras (peter.andras@ncl.ac.uk).

We are looking for a self-motivated person with a PhD on a topic related to machine learning or computational intelligence (the actual PhD area can be computer science, mathematics, physics, statistics, engineering or any other related field). You should have exceptionally strong skills in developing and coding machine learning algorithms (preferably in C# or other similar languages, including Java, C++, Matlab, R). You should have a clear desire to move towards industry and to make a real world impact through top quality research.

You must have a First Class honours degree or a Distinction level MSc degree in Computer Science, Mathematics, Physics or related fields and preferably a PhD in one of these fields. You will have the experience in software development, large-scale data analytics, development and application of machine learning methods, together with a positive attitude and good interpersonal, communication and team working skills.

The position comes with benefits including a £4,000 individual training budget and management training.

The post is fixed term for a duration of 2 Years.



To apply go to www.ncl.ac.uk/vacancies/ and search for the vacancy with reference D1181R.

Please note this position is subject to the confirmation of funding. Applicants are expected to be contacted by April 2013.

XACT is the world's leading provider of integrated registration solutions to many of the world's highest technology PCB plants.

For further details about the XACT PCB Ltd please see www.xactpcb.com

Newcastle University is one of the top UK universities, member of the select Russell Group formed by the 24 leading UK universities. The School of Computing Science is one of the top research departments in the UK in the area of computer science with a research budget of over £4 million per year. The School is a partner in the Newcastle Culture Lab which is a leading UK hub for innovative cultural and social applications of digital technology.

For further details about Newcastle University please visit our information page at <http://www.ncl.ac.uk/about/>

For further details on the School of Computing Science please see <http://www.ncl.ac.uk/computing/>

For further details about Knowledge Transfer Partnerships please visit our Research and Enterprise Service webpage at: <http://www.ncl.ac.uk/res/knowledge/ktp/index.htm>