

KTP Associate – Data Scientist in partnership with Insight Analytics Solutions

Department	Electronic and Electrical Engineering (www.strath.ac.uk/eee/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	Knowledge Transfer Partnership (KTP)	Reference No	95684
Reports To	The Head of Department through, Dr David McMillan (Academic Supervisor) and Dr Xiaoqin Ma (Industrial Supervisor)	Grade	RS79
Salary Range:	£30k - £35k plus £6,000 training budget	Contract Type:	Fixed Term (3 years)*
FTE:	1 (37.5 hours/week)	Closing Date	Wednesday, 7 February 2018

Job Advert

The Department of Electronic and Electrical Engineering (EEE) at the University of Strathclyde in partnership with Insight Analytics Solutions seek to appoint a Knowledge Transfer Partnership (KTP) Associate. The KTP is a trilateral collaborative project between the Associate, the University and a company partner (www.ktpws.org.uk).

The Department of Electronic and Electrical Engineering (EEE) at Strathclyde University is one of the leading departments of its kind and internationally recognised for research excellence, industry engagement and first-class teaching programmes. EEE contains one of Europe's leading and largest power systems and energy technology university research groups, the Institute for Energy and Environment (InstEE) with 200 staff and researchers engaged in a diverse range of collaborative, multidisciplinary research programmes, addressing issues such as the creation of sustainable energy systems, to the development of condition monitoring technologies and asset investment planning for major electricity companies. InstEE hosts 2 UK Government funded EPSRC Centres for Doctoral Training (CDTs) specialising in Wind & Marine Systems, and Future Power Networks and Smart Grids. Through formal training and research programmes, and with support from UK and global industry partners, the InstEE is an international leader in wind energy and the control of wind turbines and wind farms. Current research activities examine the dynamic analysis of turbines, their modelling and simulation, control system design and their optimisation, along with resource assessment and condition monitoring issues. It also has a focus on the development of system engineering methods and practical algorithms for the control and optimisation of complex and nonlinear systems.

Insight Analytics Solutions (IAS) is a joint venture between BP/Castrol and Romax technology. It is a rapidly growing predictive maintenance provider, designing software and engineering services which monitor the condition of wind turbines and predict breakdowns – potentially resulting in a saving for its customers by up to 30% in maintenance costs. InSight provides innovative condition monitoring and predictive maintenance solutions alongside premium consulting and advisory services for owners, operators and investors.

The Associate will undertake project work to undertake research challenges in the application of cutting edge data analytics to support future wind generation operations and maintenance. The successful applicant will be predominantly based within the company, IAS UK headquarters in Nottingham. International travel is encouraged to visit our other offices in the US, Korea and India. In addition to the KTP core development training, the Associate will have a dedicated budget of £6,000 for further training and career development as well as the possibility to enrol for a part time MPhil/PhD with the Department of Electronic and Electrical Engineering at Strathclyde University, and the University will waive the tuitions fees for the duration of the partnership.

To be considered for the role, you will be educated to a minimum of MSc level in a numerate discipline, or have relevant industry experience in addition to a relevant degree. Candidates will have an ability to plan and organise their own workload effectively and an ability to work within a team environment. As a KTP Associate working under the general guidance of an academic research leader, with the Associate developing short term research goals and proposals, playing a lead role in the delivery of pre-specified project(s) or part of the wider research and report to both academic and industry stakeholders in the partnership for further dissemination of findings.

*Following this 3 year fixed term appointment; there may be the opportunity for you to be offered future employment within IAS.

Previous applicants need not apply.

Job Description

Brief Outline of Job:

Supported by the academic team at the University of Strathclyde, the KTP associate will design, implement and test new analytical tools and to disseminate the findings within IAS, building the business case for adoption of these advanced data analytics in the company's future commercial offerings.

Main Activities/Responsibilities:

1.	Plan and manage own workload, working within project plan timelines, with guidance from academic and company colleagues as required.
2.	Write up research findings for dissemination to Company and academic stakeholders.
3.	Join external networks (both academic and industrial) to share information and ideas, inform the development of research objectives and shape company technical strategy.
4.	Presentation to senior management and communicating high level value from model development & research outcomes
5.	Network and collaborate with colleagues across both company and academic environments to facilitate development of knowledge exchange activities by, for example, participating in initiatives which establish research links with industry and influence company policy with regards to data science.
6.	Engage in continuous professional development within the university and/or company as appropriate.

Person Specification

Educational and/or Professional Qualifications

(E=Essential, i.e. a candidate must meet all essential criteria to be considered for selection, D=Desirable)

E1 Honours degree and MSc (or equivalent professional experience) in Engineering, Applied Mathematics, Physics, Computer Science, Statistics.

D1 Membership of relevant Chartered/professional bodies (including Higher Education Academy).

Experience

E2 Experience in data handling, manipulation of large data sets, pre-processing and error checking

E3 Experience in at least one high-level programming language (e.g. Python, Java)

E4 Experience in using a numerical/ statistical programming language (R or Matlab)

E5 Have a working knowledge of statistical models including model fitting techniques, strategies for testing and validation etc

E6 Sufficient breadth or depth of knowledge in the relevant discipline/s to contribute to research programmes and to the development of research activities.

D2 Experience of relevant student supervision and teaching activities.

D3 Experience of knowledge exchange related activities.

Job Related Skills and Achievements

E7 Developing ability to conduct individual research work, to disseminate results and to prepare research proposals.

E8 Ability to plan and organise own workload effectively.

E9 Ability to work within a team environment.

Personal Attributes

E10 Excellent interpersonal and communication skills, with the ability to listen, engage and persuade, and to present complex information in an accessible way to a range of audiences.

Application Procedure

Applicants are required to complete an application form including the name of three referees who will be contacted before interview without further permission, unless you indicate that you would prefer otherwise. Applicants should also submit a Curriculum Vitae and a covering letter detailing the knowledge, skills and experience you think make you the right candidate for the job. Applicants should also complete the Equal Opportunities Monitoring Form.

Other Information

Further information on the application process and working at Strathclyde can be found on our website (<http://www.strath.ac.uk/hr/workforus>).

This position forms part of the Knowledge Transfer Partnership (KTP) funded by Innovate UK. To find out how KTP works with business and the University, and the vital role you will play if you successfully secure a KTP Associate position. Please visit: www.ktpws.org.uk

Informal enquiries about the post can be directed to David McMillan, (d.mcillan@strath.ac.uk).

Conditions of Employment

Conditions of employment relating to the KTP staff category can be found at: [Conditions of Employment](#)

Probation

Where applicable, the successful applicant will be required to serve a 6 month probationary period.

Pension

The successful applicant will be eligible to join the Universities' Superannuation Scheme. Further information regarding this scheme is available from [Payroll and Pensions](#).

Interviews

Formal interviews for this post will be held in February 2018.

Equality and Diversity

We value diversity and welcome applications from all sections of the community.

The University currently holds a Bronze Athena SWAN award, recognising our commitment to advancing women's careers in science, technology, engineering, maths and medicine (STEMM) employment in academia.

