

KTP Associate - Software Engineer in partnership with Innovent Ltd.

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	85320
Reports To	The Head of Department through Dr Jinchang Ren (Academic Supervisor) and Mr David Barclay (Industrial Supervisor)	Grade	RS79
Salary Range:	Up to £27.5k plus £5,000 training budget and £5,625 travel budget	Contract Type:	Fixed Term (30 months)
FTE:	1	Closing Date	Friday, 25 August 2017

Job Advert

The Department of Electronic and Electrical Engineering, University of Strathclyde seek to appoint a Knowledge Transfer Partnership (KTP) Associate.

The successful applicant will be predominantly based within the company, Innovent Ltd., in Turriff, Aberdeenshire, and will be fully supported by a team of academics based at Strathclyde. The Associate will act as a conduit to deliver academic expertise to the company. Support will include the opportunity for personal development training within the University, as appropriate.

Innovent Ltd. is a SME and specialises in applying web-enabled techniques for image/data acquisition and analysis of herd. With the QSCAN and QBOX systems developed and distributed across the globe, especially in China, they can provide real-time image analysis of live animals and slaughter data retrieval/analysis. By monitoring the herd growth data using non-intrusive visual imaging, these have been successfully applied to pigs, beef and dairy production for improved productivity.

The Associate will undertake project work related to the re-development of these two products, this will involve intensively web-enabled vision and video analytics algorithm/software development and tools for intelligent data mining and management. This involves integration of multiple sensors and different techniques in image processing, computer vision and data mining for effective and efficient data analysis and system development.

To be considered for the role, you will be educated to a minimum of Degree level in Computing, Software Engineering, Electronic Engineering or a similar relevant field, and you will have significant relevant experience in computer programming. You will be an accomplished C++/C# programmer with experience in signal/image processing and data mining, where web-based cloud implementation of the system is essential. You must be capable of working autonomously with minimum supervision, and you will have excellent inter-personal and team working capabilities. You will have excellent verbal and written communication skills, with an ability to interact with a range of stakeholders. Due to the nature of the company's business, candidates must have excellent verbal and written communication skills in Mandarin.

Job Description

Brief Outline of Job:

To embed advanced 3-D vision processing and data mining capabilities to enhance existing QSCAN and QBOX products.

Main Activities/Responsibilities:

1. Develop a secure API for interworking with sensor data.
2. Implement a data provenance mechanism.
3. Prepare and deliver educational/marketing materials in support of technologies development.
4. Operate in close liaison with an on-going project on intelligent lighting.
5. Disseminate innovations to the wider scientific community, e.g. through conferences and/or journals.
6. Lead the process of software design.
7. Conduct robust software test strategies, including writing formal test procedures.
8. Maintain an industrial-grade code repository using standard revision management systems.
9. Participate in small scale proof-of-concept deployment of a working system.
10. Liaise with academic and industrial supervisors on progress and outputs.

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 A relevant Degree in Computing, Software Engineering, Electronic Engineering or similar with knowledge in web-enabled cloud computing for Signal/Image Processing and data mining

Experience

- E2 Significant experience of object-oriented development satisfying industrial requirements
- E3 Excellent C++/C# programming skills
- D1 Experience of mathematical modelling in signal/image analysis
- D2 Experience of statistical data analytics and mining

Job Related Skills and Achievements

- E4 Detailed knowledge in C++/C# programming
- E5 Familiar with SQL and Microsoft Direct 3D
- D3 Project management skills
- D4 Proven high-quality publications and report writing
- D5 Knowledge of sensor networks and the related industry
- D6 Net based software development skills

Personal Attributes

- E6 Excellent verbal and written communication skills in English and Mandarin
- E7 Excellent inter-personal skills, with the ability to interact with a wide range of stakeholders
- E8 Ability to plan and manage own workload
- E9 Ability to work under pressure and adapt to new constraints and adjusted objectives
- E10 Ability to work independently and as part of a team

Other Relevant Factors

- E11 A strong desire to meet project deliverables on time and to specification
- D7 A valid UK full driving licence

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 Dr Jinchang Ren, Senior Lecturer (jinchang.ren@strath.ac.uk, 0141 548 2384).

Conditions of Employment

Conditions of employment relating to the KTP Associate 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 the week commencing Friday, 8 September 2017.

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.

