**Computer Scientist/Software Developer (KTP Associate)**

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| Department | Computer and Information Sciences (www.strath.ac.uk/cis) in association with Birdi Ltd (www.hibirdi.com) |
| Faculty | Faculty of Science (www.strath.ac.uk/science/) |
| Staff Category | Knowledge Transfer Partnership (KTP) | Reference No | 113172 |
| Reports To | Prof. Richard Connor (CIS), M. Corentin Guillo (Birdi) | Grade: | KTP |
| Salary Range: | £30,000 - £50,000 + £4,500 travel and £4,000 development budget | Contract Type: | Fixed Term (24 months) |
| FTE: | 1 | Closing Date | Monday, 16 July 2018 |

# Job Advert

Bird.i is a Geospatial start up based in Glasgow. The company aims to make fresh satellite imagery accessible, affordable and usable to everybody, thereby bringing down the economic and technical barriers for access to such imagery. Over and above this, the company also provides geospatial intelligence based on time series imagery over specific locations. The company uses machine learning and computer vision techniques to extract this information.

The Department of Computer and Information Science at the University of Strathclyde is working with Bird.i in a bid to improve current vision analysis systems for use with satellite data. To this end, we 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)](http://www.ktpws.org.uk)/)

The Associate will undertake project work as required to research and implement solutions that reduce the time required for image classification and analysis. It is likely that this will include working on solutions which can lead to a reduction in the time required to create labelled datasets for training purposes, leading to an increase in the number of problems that can be solved using machine learning. The successful applicant will be employed by the University of Strathclyde, and closely supervised in the academic environment, but predominantly based a few minutes' walk away, within the company premises in central Glasgow. Bird.i has a relaxed workplace atmosphere where free thought, new ideas and innovation are actively encouraged. The project has opportunities for both academic and commercial development of ideas. Further informal information can be obtained by contacting Professor Richard Connor (richard.connor@strath.ac.uk) or Corentin Guillo (corentin@hibirdi.com)

The ideal candidate will have an excellent first degree in computing or a strongly related discipline, along with relevant work experience, or a PhD ideally with appropriate postdoctoral experience. The candidate should have the ability to plan and organize their own workload effectively, and should be able to maintain the balance between research, commercial requirements, and the necessity to steer the research into production. Excellent programming and personal communication skills are a must.

The position includes extensive professional development opportunities and a generous personal development budget. With the support of academic experts and a KTP Adviser this is an excellent opportunity which offers an extremely interesting, varied and challenging role.

# Job Description

## Brief Outline of Job:

Through this Knowledge Transfer Partnership project, you will play a key role in managing and implementing strategic developments in the company and transferring knowledge between the University and company. Typical challenges you could encounter as a KTP Associate include designing and introducing new or improved products or processes, re-organising production facilities and introducing improved quality systems and technology, in order to allow the company to break into new markets. More about Knowledge Transfer Partnerships and the benefits to your long term career can be found at <http://www.ktpws.org.uk>

## **Main Activities/Responsibilities**:

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| 1. | Review of the current products, documentation of the current technologies, establishment of baseline performance and agreement of KPIs for new generation formulations |
| 2. | Review of existing capability for current markets and identification of capability enhancements |
| 3. | Review of capability required to move into identified premium markets. |
| 4. | Development of optimisations for existing products and newly identified high value products. |
| 5. | Development of new product ideas and processes. |
| 6. | Embedding of new knowledge and systems into the company by providing training and support. |
| 7. | Project management and resourcing. |
| 8. | Producing milestone reports and presenting work at project review meetings. |
| 9. | Completion of KTP Final Report. |
| 10.  | Involvement in dissemination activities including trade publications, case studies, academic papers and external presentations. |

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| Educational and/or Professional Qualifications**(E=Essential, i.e. a candidate must meet all essential criteria to be considered for selection, D=Desirable)** |
| 1. Excellent degree-level qualification in computer science or a strongly related discipline
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| D.1 MSc in Computer Science or a strongly related discipline |
| D.2. PhD in Computer Science or a strongly related discipline |
| Experience |
| D.3. Experience and understanding of image analysis and machine learning systems |
| D.4. Use of software development frameworks such as Git and Maven |
| D.5. Use of Cloud frameworks such as Amazon EC |
| D.6. Knowledge of KTP |
| Job Related Skills and Achievements |
| 1. Analytical thinking and software development skills and experience, ideally Java
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| 1. Developed ability to conduct both individual research and development work, undertake multi-factorial experiments and analysis, prepare reports and present results
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| 1. Ability to organise, plan and use time efficiently against deadlines and milestones
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| 1. Excellent written and verbal communication skills
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| Personal Attributes |
| 1. Strong interpersonal skills with the ability to engage with a variety of different stakeholders.
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| 1. Ability to plan and deliver activities and projects well in advance and take account of possible changing circumstances
 |
| 1. Capable of analytical thinking and problem solving
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| 1. Ability to work independently as well as part of team
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# Application Procedure

Applicants are required to complete an application form including the name of three referees who will be contacted before interview without permission, unless you indicate that you would prefer otherwise. Applicants should also submit a Curriculum Vitae and a covering letter as a single document 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](file:///C%3A%5CUsers%5Cids96104%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CTemporary%20Internet%20Files%5CContent.Outlook%5CAAOLK7Z3%5Cwww.ktpws.org.uk)

Informal enquiries about the post can be directed to Prof Richard Connor, Academic Supervisor (Richard.Connor@strath.ac.uk)

**Conditions of Employment**

Conditions of employment relating to the KTP staff category can be found at: [Conditions of Employment](http://www.strath.ac.uk/hr/careerpathways/informationtermsconditions/).

## 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](http://www.strath.ac.uk/finance/financialservices/pensions/).

## Relocation

Where applicable, the University offers a relocation package to support new employees who meet the eligibility criteria. The relocation package is offered as a contribution towards costs incurred, and is designed to be flexible, allowing staff to use the financial support available in the way that will be most helpful to them. Further details are outlined in the Relocation Policy.

## Interviews

Formal interviews for this post will be held in April 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.



