

# Computer Scientist/Software Developer (KTP Associate)

Department	Computer and Information Sciences ( <a href="http://www.strath.ac.uk/cis">www.strath.ac.uk/cis</a> ) in association with Birdi Ltd ( <a href="http://www.hibirdi.com">www.hibirdi.com</a> )		
Faculty	Faculty of Science ( <a href="http://www.strath.ac.uk/science/">www.strath.ac.uk/science/</a> )		
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	Sunday, 25 March 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](mailto:richard.connor@strath.ac.uk)) or Corentin Guillo ([corentin@hibirdi.com](mailto: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:

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.

### Educational and/or Professional Qualifications

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

E.1 Excellent degree-level qualification in computer science or a strongly related discipline

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

E.2 Analytical thinking and software development skills and experience, ideally Java

E.3 Developed ability to conduct both individual research and development work, undertake multi-factorial experiments and analysis, prepare reports and present results

E.4 Ability to organise, plan and use time efficiently against deadlines and milestones

E.5 Excellent written and verbal communication skills

### Personal Attributes

E.6 Strong interpersonal skills with the ability to engage with a variety of different stakeholders.

E.7 Ability to plan and deliver activities and projects well in advance and take account of possible changing circumstances

E.8 Capable of analytical thinking and problem solving

E.9 Ability to work independently as well as part of team

## 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/workforum>).

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](http://www.ktpws.org.uk)

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

### 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.



# Conditions of Employment

## KTP Associates



### 1. GENERAL CONDITIONS

Members of staff are subject to the Charter and Statutes and the Ordinances and Regulations of the University, published in the Calendar, and to any amendments or additions thereto approved by the University Court and, in the case of the Charter and Statutes, Privy Council.

The University Court recognises the Strathclyde University and Colleges Union (SUCU) as the sole body with which it will negotiate and consult on all collective issues concerned with the terms and conditions of employment of Research staff. Such terms and conditions may be varied by the University Court after negotiation and consultation with SUCU.

The University operates probationary periods for new staff, the duration of which will be specified in individual letters of appointment. The normal probation period for posts in this staff category is 6 months. Further guidance on probationary procedures is published at <http://www.strath.ac.uk/staff/policies/hr/>.

Further information on the terms and conditions specified in this document and other staffing policies and procedures can also be found at [www.strath.ac.uk/hr/](http://www.strath.ac.uk/hr/).

Further information on the terms and conditions specified in this document is contained in the Staff Handbook, which also includes further details of such conditions as provision for sick/injury leave and pay, leave of absence, holidays and holiday pay, individual grievance procedures, review and disciplinary procedures and collective agreements. Should you not receive a copy of the handbook on appointment a reference copy is accessible by visiting Human Resources.

### 2. CONTINUOUS SERVICE

In the case of new appointments, unless otherwise stated in the letter of appointment, the date of continuous employment for the purposes of statutory employment rights will be taken to be the date of appointment contained therein. In the case of promotions, regradings or transfers, previous service is continuous.

### 3. ALLOCATION OF POST

The post to which each member of staff is appointed is allocated to both the University Department and/or other area(s), and the Company Partner named in the member's letter of appointment and any accompanying papers. Should the University Court and/or the Company Partner deem it necessary, in the furtherance of the objectives of the University (specified in its Charter) and/ or the objectives of the Company Partner, they shall, having consulted with the parties concerned and having received the advice of the Senate, re-allocate the post and/or the duties pertaining partially or wholly to it to another University department or area and/or to another Company Partner Department or to an associated Company. Any such re-allocation will be without prejudice to the other conditions of employment of the holder.

If the need arises during the course of employment for members of staff to work outside the U.K. for a period (or periods) of more than one month then such arrangements will be subject to mutual agreement. Members of staff would then be provided with a statement in advance setting out the terms covering such periods of employment.

### 4. RESPONSIBILITY AND SERVICE

The University is committed to ensuring that its business is conducted in an open and transparent manner and will take all appropriate steps to address risks of bribery or corruption. Members of staff are required at all times to act honestly and with integrity and to safeguard the resources for which they are responsible. The University has in place a robust Public Interest Disclosure (Whistleblowing) Policy to enable concerns to be brought to its attention. This is available at

<http://www.strath.ac.uk/publicinterestdisclosure/>. Other relevant policies, e.g. Fraud Prevention and Conflicts of Interests can also be found on the University's website.

Each member of staff is responsible for the proper performance of allocated duties to the person or persons specified in the member's letter and any accompanying papers. Unless otherwise indicated.

### 5. WORKING TIME

Working time is that required to fulfil the duties of the post and members of staff are expected to comply with the general working pattern of the KTP Company Partner. Further details in relation to working hours will be provided within the offer of employment and/or by the Company Partner on commencement of employment.

### 6. HOLIDAYS

Entitlement to accrue paid annual holiday will apply from the date of commencement and the accrual rate will be as per the provisions of the KTP Company Partner. Public Holidays will only apply where they are observed by Company Partner and it may be that these have to be taken from the annual leave entitlement where the Company does not apply a separate entitlement in this regard. Where Public Holidays are not observed by the Company Partner, these days may still be taken from the annual holiday entitlement, subject to authorisation. In cases where the Company Partner operates a period of annual closedown, these days may count against the accrued annual holiday entitlement, subject to the normal practices of the Company Partner. Further details and arrangements for requesting leave will be confirmed within the Offer of Employment and/or by the Company Partner on commencement of employment.

### 7. SICK LEAVE

During any period of absence through illness or injury provided the appropriate medical certificates are received the University will pay a member of staff (having taken account of the aggregate of all periods of absence due to illness during the twelve months immediately preceding the first day of the current absence) as follows:

Period of Continuous Employment at start of absence from work	Full Pay	Half Pay
Less than 1 year	1 month	1 month
1 year but less than 2 years	2 months	2 months
2 years but less than 3 years	4 months	4 months
3 years but less than 5 years	5 months	5 months
5 years or more	6 months	6 months

In order to manage the University's sick pay scheme the University requires to maintain sickness absence records on individual members of staff. When making payments after the expiry of statutory sick pay the University will deduct an amount equivalent to any benefit normally payable by the Department of Health and Social Security. For this and other details see staff handbook.

### 8. SALARY AND SUPERANNUATION

Salaries are payable monthly by means of a credit transfer to a specified bank account.

New members of staff, aged under 75, will be admitted automatically to membership of the Universities Superannuation Scheme (USS) on taking up appointment. If you are already in receipt of a USS pension you will join USS in accordance with pension auto-enrolment regulations. USS

requires a contribution from the member, currently 8 per cent of pensionable salary. A contribution, currently 18 per cent of pensionable salary, is paid by the University. From 1 April 2016 all members are part of the career revalued benefits scheme called the USS Retirement Income Builder. From 1 October 2016 a threshold, initially of £55,000 a year, will apply to the maximum salary that counts towards the USS Retirement Income Builder. From the same date a new defined contribution section of the scheme called USS Investment Builder will open and any contributions above the threshold will be invested in this section. The exception to automatic membership of the pension scheme applies if your post is located out with the UK in an EU member state. If this is the case membership of USS is not available to you.

New members of staff may opt out of USS within three months of taking up appointment and will then be treated as if they had never been a member of the scheme. After three months members of staff who wish to withdraw from USS during their employment will be required to give a minimum of 28 days' notice in writing to the University. Any member of staff who wishes to opt out should contact the Pensions Section, Finance, in the first instance ([pensions@strath.ac.uk](mailto:pensions@strath.ac.uk)). Please note that if you are a member of Pensions Plus and withdraw from USS with less than two years of membership, or cease employment with the University and have less than two years of USS membership, the option of a refund of pension contributions will not be available to you. Instead, USS must provide you with a pension benefit that is payable from your retirement date.

The University reserves the right to alter or withdraw Pensions Plus as it sees fit or as required to comply with legislative changes. Withdrawal or amendment of Pensions Plus will not affect your membership of USS. If you do not wish to participate in Pensions Plus but wish to remain in the pension scheme please contact the Pensions Team who will provide you with a non-participation form.

Information regarding pension scheme membership can be found on the Pensions pages of the University's website. Full information regarding USS can be found on the USS website – [www.uss.co.uk](http://www.uss.co.uk)

## **9. PLACE OF RESIDENCE**

The University does not normally place specific restrictions upon the place of residence of members of staff. They are, however, expected to reside in a location which is compatible with the satisfactory fulfilment of all the duties associated with their appointment and with membership of the academic community.

## **10. PERIOD OF EMPLOYMENT**

Members of staff are employed on the conditions indicated in individual letters of appointment and any accompanying papers. The University is not obliged to give notice of termination or continue any employment beyond the end of the fixed term period. Where the period of the contract of employment is for one year or less it may be terminated short of the fixed term period by 1 month's notice on either side. Where the period of the contract of employment is for more than one year, or where there have been a further contract or series of contracts immediately consecutive, the employment may be terminated short of the fixed term period by 3 months' notice on either side, except during the probationary period when the notice period is one month.

## **11. NOTICE AND TERMINATION**

The employment of a member of staff is terminable by at least three months' notice in writing, on either side; except during probationary period when the notice period is one month. If notice is being given by a member of staff earlier release may be granted if this can be arranged without detriment to the work of the department or area. If the appointment is for a fixed term it will expire at the end of the period without the necessity for notice. Fixed term contracts may be terminated by either party short of the expiry date by the serving of one months' notice in writing. The University is not obliged to continue a fixed term appointment beyond the employment period.