UK Entrepreneurial University
of the Year 2013/14
UK University of the Year
2012/13

University of
Strathclyde
Glasgow

Research Associate* in Distributed MIMO Radar Systems

Department	Electronic and Electrical Engineering (www.strath.ac.uk/eee/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	Research	Reference No	36093
Reports To	The Head of Department, through Professor John Soraghan	Grade:	7*
Salary Range:	£30,738 - £37,768*	Contract Type:	Fixed Term (20 months)
FTE:	1	Closing Date	Tuesday, 26 April 2016

Job Advert

The Institute of Sensors, Signals and Communications, within the Department of Electronic and Electrical Engineering, seeks to recruit a a Research Associate to work on a Dstl-EPSRC funded project supporting the development of novel distributed MIMO Radar systems and related algorithmic design as part of their Signal Processing Solutions in a Networked Battlespace program. The work will be undertaken in the Sensor Signal Processing and Security (SSP&S) Laboratory which is situated in the Technology Innovation Centre, University of Strathclyde, Glasgow. The SSP&S laboratory is part of the Loughborough, Surrey, Strathclyde, Cardiff and Newcastle (LSSCN) consortium working within the UK Dstl University Defence Collaboration Research (UDRC) program. The LSSCN consortium work alongside a second consortium from Edinburgh and Herriot Watt Universities. For more details on the UDRC please visit http://udrc.eng.ed.ac.uk/

The Associate will engage with established research teams within the Universities and will also be expected to work closely with defence and industrial partners including Dstl, MDC, Selex ES, Thales, QinetiQ and Texas Instruments as part of knowledge exchange activities. The Associate is expected to contribute to the research program objectives for the successful development of novel and experimentally validated methods for advanced distributed MIMO radar systems. You will disseminate results/outputs through appropriate routes and will be expected to identify sources of and contribute to, the securing of further research funding, and to contribute to knowledge exchange and teaching activities as required.

To be considered for this role you must have a good first degree (minimum class 2:1) in Engineering, Mathematics, Physics or Computer Science. In addition, you will have a PhD* in a relevant topic, alternatively considerable industrial experience will be considered. You will have strong technical engineering skills and an understanding of signal processing and rf/radar technologies. You will be an excellent programmer and will be familiar with advanced ICT technologies. You will have excellent communication and interpersonal skills and will be experienced in conducting research projects both individually and as part of a team.

*Whilst a Research Associate is ideally sought for this position, applications from candidates who are close to PhD completion or whose award is pending are welcome. In such circumstances, the appointment will be made at Research Assistant level (RS06 salary scale £26,537 - £29,847) and duties will be adjusted to reflect the grade of the post. This will continue until the PhD award is confirmed, at which point the duties and grade will be revised accordingly.

the place of useful learning
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Job Description

Brief Outline of Job:

To undertake research, as part of a research group and to deliver research activities in the area of Distributed MIMO radar Systems by carrying out fundamental, applied and experimentally based research activities. To lead the delivery of objectives defined in work package 4 of the LSSCN consortium framework (see http://udrc.eng.ed.ac.uk/ for further details). To disseminate research outputs through the appropriate reporting channels. To input as a team member to administrative activities and to assist where required in relevant teaching, professional and knowledge exchange activities.

Main Activities/Responsibilities:

1.	Conduct research as part of the UDRC Workpackage 4 LSSCN consortium collaborative research project.
2.	Setup experimental environments within the SPS&S laboratory in support of the research.
3.	As part of a wider research group or programme, develop research objectives and proposals for own or joint research and play a lead role in relation to a specific project/s or part of a broader project, with guidance from senior colleagues as required.
4.	Plan and manage own workload, with guidance from colleagues as required.
5.	Write up results of own research and contribute to the production of research reports and publications.
6.	Identify sources of funding and contribute to the securing of funds for research, including drafting grant proposals and planning for future proposals.
7.	Prepare technical presentations and present/disseminate work at conferences, workshops, and meetings as required.
8.	Contribute to the planning of the research demonstrators to back up your fundamental achievements.
9.	Assist with the supervision of student projects and the delivery of introductory classes as required.
10.	Represent Strathclyde at project meetings and participate in industrial presentations as required.

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	Good Honours Degree in Engineering, Computer Science, Mathematics, Physics or equivalent
E2	PhD in Engineering, Computer Science, Mathematics or Physics

Experience

E3	Programming experience in Matlab, C/C++ or similar languages
E4	Understanding and experience of Signal Processing methods
E5	Experience in rf and radar systems
D1	Technical writing and presentation experience
D2	Experience in student mentoring and teaching activities

Job Related Skills and Achievements

E6	Good programming and data analysis skills across a range of engineering applications/packages, e.g. Matlab, C/C++
E7	Developing ability to conduct individual research projects, to disseminate results as appropriate (e.g. through journal papers, reports and conferences) and to prepare research proposals
E8	Excellent verbal and written communications skills, with the ability to interact with a range of stakeholders
D3	Experience in student mentoring and teaching activities

Personal Attributes

E9	Ability to work independently and as part of a team
D4	Experience of knowledge exchange related activities
E10	Ability to plan and organise own workload effectively

Other Relevant Factors

D5   Availability to travel occasionally within UK and abroad

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).

Informal enquiries about the post can be directed to Dr Alison Cleary, Technical Project Manager (alison.cleary@strath.ac.uk/0141 444 7322).

Probation

Where applicable, the successful applicant will be required to serve a 9 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 are expected to be held on Thursday, 12 May 2016.

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
Research Staff

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, the Privy Council. Staff are also expected to familiarise themselves with, and adhere to, general University policies and procedures, as published on University web pages.

The University Court recognises Strathclyde Universities and College 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.

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

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 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.

Any member of staff may at any time be exposed to commercially sensitive information, information related to potentially valuable intellectual property or information which may otherwise be of a confidential nature. This information, which could be found anywhere in the University, may be written or disclosed orally, can include information of a commercial or technical nature, and may be owned by the University or by third parties. The University requires all employees to keep any such information confidential in the first instance and not disclose, publish or otherwise disseminate it without prior consent of the University. Such confidentiality obligations are commonplace and in the commercial interests of the University. When in doubt advice should always be sought from Research and Knowledge Exchange Services prior to disclosure.

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 9 months for those at grades 6 and 7, and 12 months for grades 8 and above. Further guidance on probationary procedures is published at http://www.strath.ac.uk/staff/policies/hr/.

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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.

2. SALARY

Appointments are made at an appropriate salary point on the University's grading structure, with initial placing determined according to qualifications and experience. Increments are paid to staff on the 12 month anniversary of their appointment. Where this is not the first of the month, the increment will be paid on the first of the month directly after the 12 month anniversary. This allows 1 progression to the next point on the salary scale until the top guaranteed point of the scale is reached.

Salaries are paid directly to staff members nominated bank account, normally on the second last working day of the month.

3. HOURS OF WORK

Working time is that required to fulfil the duties of the post. The University Court recognises that research staff carry out these duties in a variety of ways appropriate to the nature of the research activity, but expects regular contact to take place between the research staff employee and the supervisor/grantholder (where these positions are occupied by different individuals) during normal working hours on week days. There are exceptions to this pattern which may involve contact at other locations or in the evenings, or at weekends, but these arrangement will be made with the agreement of the member of staff concerned.

Duties may, by arrangement with Head of Department/School/Director, include some teaching associated with the post (up to a maximum of 40 hours per semester) for which no additional payment will be made.

Additional work which does not fall within the scope of that described above may by arrangement attract payment which must be authorised and processed through the payroll.

4. HOLIDAYS

Annual leave entitlement is 31 days per year to be taken by agreement with the line manager. For staff members working on a part-time basis, holidays will be calculated on a pro-rata basis.

In addition to annual leave there is an entitlement to eleven public holidays per year which should be taken on days that the University is closed for this purpose. The University presently closes for four additional days over the Christmas and New Year period. **These additional days count against the annual leave entitlement.**

For staff members working on a part-time basis, public holiday entitlement will be calculated on a pro-rata basis.

Annual leave and public holiday entitlements should be taken in the leave year to which they relate. Up to five days leave can be carried forward into the new leave year subject to line management agreement. In exceptional circumstances, Heads of Department/School/Director may approve carry forward of accrued annual leave in excess of five days.

The University's expectation is that staff take all accrued holidays prior to their termination date. If staff have exceeded their entitlement the University will deduct an equivalent number of days pay from final salary payments.

5. SICKNESS ABSENCE

During any period of absence through illness or injury provided the appropriate notification and certification procedures have been followed 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 Work and Pensions. For full details on the general University policy in this area please refer to the Sickness Absence Management Policy at www.strath.ac.uk/staff/policies/hr.

6. PENSIONS

New members of staff, aged under 75, will be admitted to membership of the Universities Superannuation Scheme (USS) on taking up appointment. USS requires a contribution from the member (currently 6.5 per cent of salary for the Career Revalued Benefits section of the scheme and 7.5 per cent for the Final Salary section), to which a contribution of salary is added by the University as required by USS. If a new member of staff has previously been a member of USS and re-joins the scheme on or after 1 October 2011 they will be eligible to re-join the Final Salary section of the scheme if they:

- Have left before 1 October 2011 and have deferred benefits in USS and re-join before 1 April 2014; or
- Have left or leave the Final Salary section after 30 September 2011 and re-join the scheme within 30 months of leaving.

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).

Information regarding pension scheme membership can be found on the Finance webpage. Full information regarding USS can be found on the USS website – www.uss.co.uk

7. PLACE OF WORK AND RESIDENCE

Members of staff will be based on the John Anderson Campus, unless otherwise stated in the letter of appointment. The Department/School in which the post is initially placed will be specified in the letter of appointment although there will be an expectation to work at such other places as required in the course of employment.

If the need arises for members of staff to work outside the UK 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.

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

8. CONSULTANCY/FURTHER ACTIVITIES

To support the strategic objectives of the University and to facilitate individual professional development, the University encourages staff to engage in professional activities with outside bodies related to their field of work. In many cases, such activity will be approved on the basis that it represents University knowledge exchange activity and should therefore be treated as part of the individual's overall workload and managed through the University's systems. It is also recognised that there will be some cases where an activity is entirely separate from the University and should thus be notified/approved as a personal business activity. For further information please refer to the "University Procedure in relation to Work for Outside Bodies including Consultancies", which forms part of the employment contract and can be accessed at .www.strath.ac.uk/hr

9. DISCIPLINARY AND GRIEVANCE PROCEDURES

Further information on the University's disciplinary and grievance procedure can also be found at www.strath.ac.uk/policies/hr or on request from Human Resources.

10.   NOTICE AND TERMINATION

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 that 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 one months 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 three months' notice on either side, except during the probationary period when the notice period is one month.

If the appointment is for a fixed term it will expire at the end of the period without the necessity for notice.

Revised March 2014