Lecturer/Senior Lecturer in Machine Learning
School of Natural and Computing Sciences

Closing date: 9 June 2019
Interview date: 05 July 2019
Reference number: NCS145A
Introduction

The School of Natural and Computing Sciences is a vibrant and dynamic centre, internationally renowned for excellence both in teaching and research. It comprises four academic departments, namely: Chemistry, Computing Science, Mathematics and Physics. Hosting over 95 academic and research staff, 80 research students, 75 postgraduate taught students and 680 undergraduates; it is a close knit and friendly community, based on the main campus at Kings College.

The School is looking to appoint a Lecturer/Senior Lecturer in Computing Science, with expertise in machine learning, ideally with a focus on machine learning over large datasets. The post-holder will undertake both foundational and applied research, with the latter strengthening departmental collaborations across domains such as healthcare, oil and gas, and offshore decommissioning.

Computing Science at Aberdeen currently has 16 members of staff, 11 post-doctoral research fellows, and 40 PhD students. Research is underpinned by a strong and broad funding portfolio based around two themes (Trust, Identity, Privacy and Security, and Artificial Intelligence), with nearly £4M in funding over the past five years from research councils, charities, the EU, and industry. In REF2014, the department was ranked 16th in the UK in terms of research intensity, with 75% of outputs ranked as 3* or 4*. Much of the research is interdisciplinary in nature, reflecting the department's involvement with, and funding from, the RCUK Digital Economy theme; most notable of which was the award of a Digital Economy Hub (2009-2015).

The department runs two highly successful taught MSc programmes: a specialist MSc in Artificial Intelligence, and an MSc in Information Technology. At the undergraduate level, teaching revolves around the 4-year BSc (Hons) degree, as well as multiple joint degrees taught with other disciplines.
Job description

Main purpose of the role:
The School of Natural and Computing Sciences is looking to appoint a Lecturer/Senior Lecturer in Computing Science with research interests in machine learning, whose work is complementary to research within the school covering areas such as natural language technologies; human-oriented AI; and multi-agent systems. The post-holder will undertake both foundational and applied research, with the latter strengthening departmental collaborations across domains, with a focus on the Oil & Gas industry. In particular, the post-holder will engage closely with the National Decommissioning Centre (NDC) as well as relevant industry stakeholders due to the importance of machine learning and large-scale data analytics for the offshore industry. The NDC is a £38m partnership between the Oil & Gas Technology Centre (OGTC) and the University of Aberdeen. OGTC is an industry-led research and knowledge organisation, backed by both the UK and Scottish governments to fund and direct projects that help to unlock the full potential of the UK North Sea. The National Decommissioning Centre (https://www.ukndc.com) aims to work in partnership with companies to become the global leader in R&D focused on reducing costs, extending field and asset life, and transforming the conventional approach to decommissioning.

The successful candidate will also be expected to teach on a broad range of computing science lectures, laboratory classes and tutorials, and undertake administrative duties as necessary.

Key responsibilities:

Research

- To conduct cutting-edge research.
- To prepare and submit manuscripts for publications in leading international conferences and journals.
- To prepare and submit grant applications for external (e.g. Research Council) research support.
- Take responsibility for the supervision and training of postgraduate research students.

Teaching & Promotion of Learning

- To contribute to the design, development, delivery, assessment and administration of a broad range of existing and new undergraduate and taught postgraduate courses and programmes.

Administrative & Support

- To supervise students directly, providing a high standard of support and help. To identify the learning needs of students and defining learning objectives.
- To undertake department level administration, as determined by the Head of School and Academic Line Manager.
Candidate background

Applications are invited from candidates who can demonstrate an excellent research profile, as evidenced by publications in leading academic conferences and journals. Candidates will also have the potential for sustaining a funded research programme at the University of Aberdeen and be familiar with the UK funding landscape.

The successful candidate should have a PhD and postdoctoral research experience in Computer Science or a related discipline.

For a Senior Lecturer position, candidates should demonstrate a sustained track record of successful grant applications, research student supervision and undergraduate/taught postgraduate teaching.

Terms of appointment

Salary will be at the appropriate point on the Grade 7 salary scale (Lecturer) (£40,792 - £48,676 per annum) or Grade 8 salary scale (Senior Lecturer) (£51,630 - £58,089 per annum). The placement on the scale is negotiable according to qualifications and experience.

Any appointment will be made subject to satisfactory references, and in the case of Lecturers, a three year probation period.

For further information on various staff benefits and policies please visit www.abdn.ac.uk/staffnet/working-here

Should you require a visa to undertake paid employment in the UK you will be required to fulfil the minimum points criteria to be granted a Certificate of Sponsorship and Tier 2 visa. As appropriate, at the time an offer of appointment is made you will be asked to demonstrate that you fulfil the criteria in respect of financial maintenance and competency in English. Please do not hesitate to contact Heather Clark, HR Adviser on +44 (0)1224 273244 or email h.m.clark@abdn.ac.uk for further information.
# Person specification

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<th>Education/Qualifications</th>
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| Academic, technical and professional education and training | • PhD in computer science or a related discipline with at least one year’s postdoctoral experience. | • Membership of appropriate professional/learned institutions.  
• Appropriate academic professional and teaching qualification (e.g. FHEA). |

| Work and Other relevant experience (including training) | EG Specialist knowledge, levels of experience, supervisory experience, research | • Record of publications in leading international conferences and journals (commensurate with career stage).  
• Strong research profile with ability to develop and lead research projects (commensurate with career stage).  
• Demonstrable potential to carry out leading research in specialist area.  
• Record of or evidence-based potential for securing funding to support research.  
• Experience, or demonstrable potential, in the development of taught courses at undergraduate or postgraduate level, or equivalent experience (commensurate with career stage).  
• Teaching capabilities at undergraduate and postgraduate levels.  
• Ability to provide supervision to doctoral students. |
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|                                                         | • Experience of University teaching, supervision of students at undergraduate and postgraduate levels (commensurate with career stage).  
• Experience in the administration of academic affairs or similar experience (commensurate with career stage).  
• Links with relevant international research groups. |

| Personal qualities and abilities | EG Initiative, leadership, ability to work on own or with others, communication skills | • Excellent written, oral and presentation skills.  
• Ability to think creatively and innovatively and impart enthusiasm for the subject.  
• Excellent organisational skills.  
• Ability to balance the pressures of teaching, research and administrative demands and competing deadlines. |
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|                                  | • Ability to participate in appropriate national and international research networks.  
• Ability and willingness to work in multidisciplinary environment. |
- Excellent networking skills in order to develop strong relationships with external partners and with academics and researchers from other institutions.

- Ability to contribute, professionally and otherwise, to the life of the School and the University, commensurate with career stage.

- Demonstrable ability to work well as part of team.

- Ability to work with minimum supervision and act on own initiative.

- Commitment to personal development and updating of knowledge and skills.

**Other**

eg special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements etc.

- Willingness and flexibility to respond to demands of the role.

- Willing to travel nationally and internationally in support of teaching and research.

- Ongoing commitment to personal career development.
The University

Founded in 1495, Aberdeen is Scotland’s third oldest University and the fifth oldest in the UK. Ranked within the world top 160 in the Times Higher Education Rankings 2019 and named Scottish University of the Year in the Times and Sunday Times Good University Guide 2019. Aberdeen is ‘open to all and dedicated to the pursuit of truth in the service of others’.

Aberdeen is a broad based, research intensive University, which puts students at the head of everything it does. It has significant academic strengths and potential across a wide variety of disciplines. Outstanding in a wide range of discipline areas, Aberdeen has also been credited for its international reach and its commercialisation of research ideas into spin out companies.

The University has over 14,000 matriculated students and 3,600 staff representing 130 nationalities. We encourage bold thinking, creativity and innovation and we nurture ambition with many opportunities for professional and personal development in an inclusive learning environment which challenges, inspires and helps every individual to reach their full potential.

The University combines a distinguished heritage with a forward-looking attitude. In the past few years, the University has encouraged creativity in its academic staff, broken new ground with an innovative curriculum, and developed state-of-the-art facilities including the new Sir Duncan Rice Library and the Aberdeen Sports Village and Aquatics Centre. In looking to the future, the University seeks to enhance its reputation as one of the world’s leading Universities by moving forward with ever more ground-breaking research; ensuring students have an intellectual and social experience second to none; and capitalising upon the dual role as one of the major institutions of the north and as a cornerstone of regional economic and cultural life.
The City and the Region

Aberdeen & Aberdeenshire

With a population of approximately 230,000, the city stands between the Rivers Dee and Don. This historic city has many architectural splendours and the use of its sparkling local granite has earned Aberdeen the name of the Silver City. Recognised as the oil capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live.

Aberdeen enjoys excellent communication services with other European cities - e.g. flying time to London is just over one hour with regular daily flights. There are direct air links to London (City, Heathrow, and Luton), Manchester, Birmingham, Leeds, Southampton, Belfast and East Midlands within the U.K. There are also flights to international hub airports: Amsterdam (Schiphol), and Paris (Charles De-Gaulle) as well as flights to other European destinations (http://www.aberdeenairport.com). Road and rail links are also well developed.

The Grampian Region which took its name from the Grampian Mountains has a population of approximately 545,000. It is made up of five districts – Aberdeen, Banff & Buchan, Gordon, Kincardine & Deeside and Moray. The city and the surrounding countryside provide a variety of urban, sea-side and country pursuits. Aberdeen has first class amenities including His Majesty's Theatre, Music Hall, Art Gallery, the Aberdeen Exhibition Centre, Museums, and Beach Leisure centre. Within a short time, beach pursuits, equine activities, salmon, trout and sea fishing, hill-walking, mountaineering, golf, sailing, surfing and windsurfing can be reached. The city and the surrounding countryside are repeatedly given high ratings for quality of life in surveys.

Aberdeenshire is one of Scotland's most appealing regions. Royal Deeside and the Cairngorms National Park are within easy access of the city, and there are a variety of towns and villages scattered along the coastline.

Aberdeen and Aberdeenshire cater for a wide range of tastes in sporting and cultural activities.

To find out more about Aberdeen and Aberdeenshire go to www.visitabdn.com
How to apply

Online application forms are available at www.abdn.ac.uk/jobs

The closing date for receipt of applications is 9 June 2019

Should you wish to make an informal enquiry please contact
Professor Peter Edwards, Head of School
01224 274078
hos-ncs@abdn.ac.uk

Please do not send application forms or CVs to Professor Edwards

Please quote reference number NCS145A on all correspondence

The University pursues a policy of equal opportunities in the appointment and promotion of staff.