1495

UNIVERSITY OF ABERDEEN

LECTURER/SENIOR LECTURER (COMPUTING SCIENCE)
5 posts
School of Natural & Computing Sciences

Closing date:	**16 February 2023**
Interview date:	**To be confirmed**
Reference number:	NCS201A

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Athena SWAN Bronze Award

Stonewall SCOTLAND DIVERSITY CHAMPION

INTRODUCTION

The School of Natural and Computing Sciences is a vibrant and dynamic centre, internationally renowned for excellence both in teaching and research. It currently comprises four academic units, namely: Chemistry, Computing Science, Mathematics and Physics. Hosting over 95 academic and research staff, 60 research students, 120 postgraduate taught students and 690 undergraduates; it is a close knit and friendly community, based on the main campus at King's College.

Launched in September 2021, the *Aberdeen Institute of Data Science and Artificial Intelligence, South China Normal University* is a collaboration between the University of Aberdeen and South China Normal University (SCNU) to deliver three 4-year undergraduate degree programmes in China closely based on the content of the existing BSc (Hons) Computing Science degree at Aberdeen. The Institute builds on an existing 2+2 articulation programme in Computing Science and Software Engineering with SCNU.

The programmes delivered as part of the Institute are:
- BSc Computing Science
- BSc Artificial Intelligence
- BSc Business Management & Information Systems [*Joint with the Business School*]

Students registered on these programmes complete their studies entirely in China, with teaching delivered jointly by SCNU and Aberdeen staff, with the latter travelling to China to do so.

Data Science & Artificial Intelligence have been recognised as a priority for the University as part of its 'Aberdeen 2040' strategy, and the School is looking to significantly increase its strengths in these and related areas.

Research within computer science focuses on Agents (work covering areas such as argumentation, automated planning, computational trust and verification and synthesis among others); Natural Language Generation and other areas of Computational Linguistics; Machine Learning; Cybersecurity and Privacy and Human-Centred Computing. More on our research areas can be found here:
https://www.abdn.ac.uk/ncs/departments/computing-science/research-157.php

Computing Science currently has 29 members of academic staff, together with around 40 postdoctoral researchers and PhD students. In REF2021, 92% research in computer science and infomatics at Aberdeen was ranked as world-leading or internationally excellent. Research is underpinned by a strong and broad funding portfolio based around our two themes, with nearly £4.5M in funding over the past five years from research councils, charities, the EU, and industry. Recent research awards within the department relevant to the proposed appointments include Realising Accountable Intelligent Systems (EPSRC, 2019-2022), Interactive Natural Language Technology for Explainable Artificial Intelligence (EU, 2019-2023), and Enhancing Agri-food Transparent Sustainability (EPSRC, 2021-2024).

Our School is also home to a very successful physics and applied mathematics research group with specialisms in data science. For this role we are looking for ana applicant who specialises in data science from a computer science perspective and who will play a role in helping to develop our interdisciplinary credentials in this field. The School also offers a very successful taught MSc program in Data Science.

JOB DESCRIPTION

MAIN PURPOSE OF THE ROLE:

The School of Natural and Computing Sciences is looking to appoint 5 full-time staff at Lecturer or Senior Lecturer level in Computing Science to teach on a broad range of computing science lectures, laboratory classes and tutorials, and undertake administrative duties as necessary – as part of the *Aberdeen - South China Normal University* Institute. Appointees will primarily be based in Aberdeen but will be expected to travel to China to deliver their teaching obligations; visits are likely to be up to 4 weeks duration at any one time.

Applicants should have research expertise in Computing Science, preferably overlapping with our current research strengths, and have the ambition to work across disciplines and with industry to achieve their research vision as part of the Aberdeen 2040 'Data & Artificial Intelligence' challenge.

Candidates whose work is applicable to domains such as cybersecurity, energy, agri-food and healthcare, or who undertake research related to machine learning, explanation, human/machine collaboration, multi-agent systems or natural language technologies are particularly encouraged to apply. Successful applicants are expected to strengthen the School's expertise in these areas.

KEY RESPONSIBILITIES:

Research
- To conduct cutting-edge research in fields of Computing Science closely related to our core research strengths within agent-based research, machine learning, cybersecurity and privacy, natural language generation and human-centred computing

- To prepare and submit manuscripts for publications in leading international conferences and journals.

- To prepare and submit grant applications for external (e.g. UKRI) research support.

- Take responsibility for the supervision and training of postgraduate research students.

Education

- To contribute to the design, development, delivery, assessment and administration of a range of undergraduate courses delivered as part of the Aberdeen - South China Normal University Institute. This includes contribution to supervision of undergraduate dissertations within the Aberdeen - South China Normal University Institute.

- To engage with modern pedagogical approaches to University teaching and implement best practice in teaching

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 administrative duties, as determined by the Head of School and Academic Line Manager.

- Participating in the development and delivery of the School's strategic objectives

CANDIDATE BACKGROUND

Applications are invited from candidates who can demonstrate an excellent research profile, as evidenced by publications in leading academic conferences and journals. They must also be able to demonstrate their potential for sustaining a funded research programme at the University of Aberdeen. Enthusiasm for innovation in Computer Science education and a desire to contribute actively to the success of the *Aberdeen - SCNU* Institute is also essential.

Candidates should have a PhD and demonstrable research experience in Computer Science or a related discipline relevant to the role.

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

TERMS OF APPOINTMENT

Lecturer salary will be at the appropriate point on the Grade 7, (£43,414 - £51,805 per annum) and Senior Lecturer will be at the appropriate point on the Grade 8 (£54,949 - £61,823 per annum) negotiable with placement according to qualifications and experience.

It is a fundamental requirement of the role that you will spend periods of time working overseas in China. It is expected that teaching time in China will be approx. 4 weeks, twice a year but may on occasion be more.

Any appointment will be made subject to satisfactory references, and in the case of Lecturers, a 3-year probation period.

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

This role is based in the UK and as such the successful candidate will be required to live and work in the UK.

Should you require a visa to undertake employment in the UK you will be required to fulfil the minimum points criteria to be granted a Certificate of Sponsorship under the requirements of the Skilled Worker visa. At the time an offer of appointment is made, you will be asked to demonstrate that you fulfil the criteria in respect of qualification and competency in English. For research and academic posts, we will consider eligibility under the Global Talent visa. Please do not hesitate to contact Lucy Redmayne, HR Adviser (lucy.redmayne@abdn.ac.uk) for further information.

In addition, you will be required to be eligible for and be in a position to obtain the appropriate work visa in China.

The candidate appointed to this post may be eligible for homeworking on an occasional or regular basis. For more information, please refer to our Homeworking Policy.

AT A GLANCE

SALARY:

Lecturer Grade 7

(£43,414 - £51,805 per annum)

Senior Lecturer Grade 8
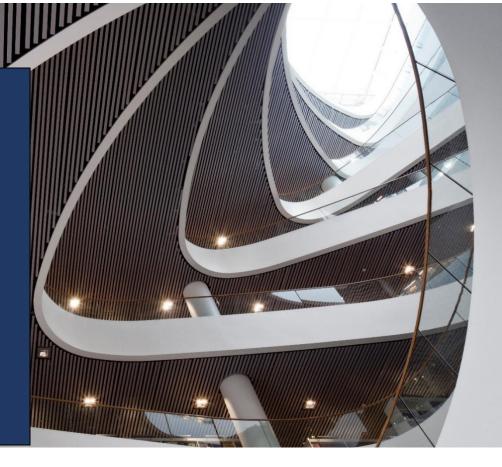
(£54,949 - £61,823 per annum)

HOURS OF WORK:

37.5 hours per week

CONTRACT TYPE:

Substantive

LOCATION:

Aberdeen with travel to China

PERSON SPECIFICATION

	ESSENTIAL	**DESIRABLE**
Education/Qualifications Academic, technical and professional education and training	• *PhD in computer science or a related discipline.*	• *Membership of appropriate professional/learned institutions.* • *Appropriate academic professional and teaching qualification (e.g. FHEA).*
Work and Other relevant experience (including training) e.g. Specialist knowledge, levels of experience, supervisory experience, research	*Lecturer position:* • *Record of publications in leading international journals or conferences.* • *Demonstrable potential to carry out leading research in specialist area.* • *Strong research profile with ability to develop and lead research projects.* • *Record of, or evidence-based potential for, securing funding to support research.* • *Evidence of teaching experience at undergraduate and postgraduate levels.* • *Experience, or demonstrable potential, in the development of taught courses at undergraduate or postgraduate level, or equivalent experience.*	• *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).* • *Track record of successful grant application, research student supervision and undergraduate/taught postgraduate teaching (essential for appointment to Senior Lecturer/Reader)* • *Evidence of working in interdisciplinary research areas* • *Evidence of wider impact of research or teaching work outside of academia (with external stakeholders)*

ESSENTIAL	DESIRABLE
• *Ability to provide supervision to doctoral students.*	
Senior Lecturer position: *As above, and additionally:*	
• *Record of securing funding to support research at the level of PI of a UKRI project or equivalent*	
• *Evidence of having designed, delivered and led teaching courses at the module level*	

	ESSENTIAL	DESIRABLE
Personal qualities and abilities e.g. 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.* • *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.* ***Senior Lecturer/Reader position:*** • *Leadership of academic projects*	• *Ability to participate in appropriate national and international research networks.* • *Ability and willingness to work in multidisciplinary environment.*

Other	**ESSENTIAL**	**DESIRABLE**
e.g. special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements etc.	• *Fundamental requirement of your employment that you will spend periods of time working overseas in China.* • *Able to travel to national and international meetings and conferences and to deliver teaching at different locations including overseas.*	

open to all and dedicated to the pursuit of truth in the service of others

The University of Aberdeen is a broad based, research intensive University, and we put students at the centre of everything we do. Outstanding in a wide range of discipline areas, Aberdeen is credited for its international reach and commercialisation of research ideas into spin out companies. The University has over 16,000 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 and inspires.

CURRENT CONTEXT

The University continues to uphold the principals of the foundational purpose. We remain committed to delivering positive change both locally and globally. We work together and with our partners in an interdisciplinary way, catalysing world-leading research in our areas of strength: Energy Transition; Social Inclusion and Cultural Diversity; Environment and Biodiversity; Data and Artificial Intelligence; and Health, Nutrition and Wellbeing. We are investing in our future and have committed £100m to upgrading our campus, including the new fully digitised Science Teaching Hub, the regeneration of the historic King's Quarter and a new Business School building. Our commitment to our students, campus and community has led to us being named a Top 20 UK institution in two major league tables[1] and 4th in the UK for overall student satisfaction[2].

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[1] The Times and Sunday Times Good University Guide 2023 and the Guardian University Guide 2023
[2] National Student Survey (NSS) 2022

Updated October 2022

On our 525th anniversary as a University we launched **Aberdeen 2040**, our strategic vision for the next 20 years. Four strategic themes will shape our learning and discovery, underlined by 20 commitments we have made against each theme:

- **Inclusive**
  We welcome students, staff and partners from all backgrounds, organisations and communities. We value diversity.

- **Interdisciplinary**
  We innovate in education and research by generating, sharing and applying new kinds of knowledge. We learn together.

- **International**
  We connect with others and extend our networks and partnerships around the world. We think across borders.

- **Sustainable**
  We understand and nurture our environment, and take care of our resources, including our people and finances.

  We work responsibly

OUR EDUCATION

Recognised as the Scottish University of the Year in the Times and Sunday Times Good University Guide 2019, we remain true to our roots as an ancient Scottish university, combining breadth and depth in our degree programmes and drawing strength from the quality of our research. Our flexible curriculum encourages students to grow as independent learners and therefore to thrive as graduates in the diverse workplaces of the future. Our education is open to all and we are setting ambitious targets to further widen access.

OUR RESEARCH

Researchers at the University of Aberdeen have been at the forefront of innovation and excellence throughout the centuries, generating insights in medicine, science, engineering, law, social sciences, arts and humanities. This research has contributed to five Nobel prizes as well as other awards such as the Queen's Anniversary prize. Our research is intellectually rigorous working within our established areas of excellence as well as new methods of enquiry. We will continue to generate new knowledge addressing economic and societal issues with ambition and imagination, ensuring that it is globally excellent and locally relevant.

INTERNATIONAL

Aberdeen is increasing its international presence, positioning the University as a global organisation and building on established global partnerships around the world, including Qatar, China, North America, Europe. We feature in the top 50 institutions worldwide for international students[3].

IMPACT

In 2020 the University signed the United Nations Sustainable Development Goals accord, solidifying our commitment to developing the world in a sustainable way. In 2022 we were listed in the global Top 100 for 8 of these goals[4].

Our highly cited work in zero-carbon technology and global outlooks makes us Scotland's best institution for environmental research[5].

THE SCHOOL OF NATURAL AND COMPUTING SCIENCES

The School of Natural and Computing Sciences addresses the fundamental physical sciences, applies mathematics to interdisciplinary problems, develops the next generation of smart computational systems, and takes chemistry from lab to every-day life. The School consists of four departments: Chemistry; Computing Science; Mathematics & Physics. Our research is high quality and often outward facing, with many interactions with other disciplines, with public bodies and with industry. We have leading groups in each discipline. From topology to transition metals, from natural language to natural products, from complex systems to catalysis, our research is diverse and also covers the range from pure to applied.

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[3] Times Higher Education World University Rankings 2021
[4] Times Higher Education Impact Rankings 2022
5 QS World University Rankings 2022

In addition, we have been involved in a number of spin-out companies in diverse areas such as drug development for Alzheimer's disease (TauRx, Chemistry, Physics), natural language generation for multiple applications including medical monitoring and weather reporting (Arria, Computing Science) bone replacement materials (Sirakoss, Chemistry) and new fuel cell materials (Enocell, Chemistry).

The Department of Chemistry was established in 1793 and is an outward looking, vibrant and diverse department with a strong international collaborative profile. We are proud to have been ranked first in Scotland for research impact in REF2014, driving exciting breakthroughs in new medicines, energy, functional materials, catalysis, biomaterials, and the environment. We have excellent research facilities and engage and work with multiple partners (academic and industry) to enhance the impact of our research.

ABERDEEN AND ABERDEENSHIRE

Scotland's third largest city, Aberdeen sits on the coast between the mountains of Aberdeenshire and the stunning North Sea coastline. The Aberdeen City region is a can-do place that is actively investing, at scale, in its future.

Renowned as a Global Energy Hub, Aberdeen is a vibrant, entrepreneurial region, home to a unique mix of business opportunities and specialist skills across various sectors including energy, technology, life sciences and food & drink. More than 20% of Scotland's top businesses are located in this region which is taking great strides to ensure that it continues to compete on a world stage. Investments of more than £10 billion of public and private infrastructure is due to be delivered before 2030, marking an exciting time to be part of a genuine world-class location.

Built from sparkling local granite Aberdeen has earned the name of the Silver City. As the energy capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live, work and study. Due to its global business and international energy industry credentials, Aberdeen is well served by local and national transport infrastructure with excellent rail networks that run both North and South of Scotland and the rest of the UK. It also acts as an international travel hub. Flying time to London is just over one hour with regular daily flights and serves international travel to European centres such as Amsterdam (Schiphol) and Paris (Charles de-Gaulle) as well as flights to other European destinations.

The City and the surrounding countryside provide a variety of urban, seaside and country attractions. Aberdeen has first class amenities including His Majesty's Theatre, Music Hall, Art Gallery, the P&J Arena, Museums, and Beach Leisure Centre. The City is framed by its accessible beach front which is within a short walk of the city centre and there are an array of activities available across the region such as hill walking; mountaineering; sailing; surfing; salmon, trout and sea fishing; golf; sailing; surfing and windsurfing. The surrounding countryside, known as Aberdeenshire, is also 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.

The city and the surrounding area have ranked consistently highly in nationally recognised quality of life surveys, coming out top 10 as one of the best places to live in Scotland in 2020 in the annual Bank of Scotland survey. To find out more visit www.visitabdn.com

EQUALITY AND DIVERSITY

The University values a diverse working environment and recognises the benefits this can bring. The University is keen to receive applications from individuals from across all of the equality protected characteristics (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation).

The University supports opportunities for flexible working for a range of reasons and has policies in place to facilitate this. The policies can be found at https://www.abdn.ac.uk/staffnet/working-here/flexible-working--5607.php.

The University's commitment to gender equality has been recognised through the achievement of an Athena SWAN Bronze award at an institutional level and across all its subject areas. The University is also a Stonewall Diversity Champion to further LGBT+ equality.

The University is signed up to Advance HE's Race Equality Charter, affirming the University's commitment to the charter's aim of improving the representation, progression and success of minority ethnic staff and students within higher education.

Candidates who are British Sign Language (BSL) users can contact us directly by using contact SCOTLAND-BSL.

The University is delighted to be accredited as a Disability Confident employer and strives to ensure that disabled staff and students have the opportunity to work and study in an inclusive, accessible and supportive environment.

www.abdn.ac.uk/staffnet/governance/equality-and-diversity-277

HOW TO APPLY

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

Applications should include:

- A curriculum vitae
- A research statement outlining your research plans over the next 3 years (max 2 pages A4)
- A teaching statement outlining your views on University teaching in a post-pandemic age (max 1 page A4)
- A cover letter outlining your reasons for making an application and your fit with the job description and the School (max 2 pages A4)

The closing date for receipt of applications is **16 February 2023**

Should you wish to make an informal enquiry please contact:

Dr Tryphon Lambrou, Interim Vice Dean for SCNU JI, e-mail: **tryphon.lambrou@abdn.ac.uk**

Please do not send application forms or CVs to **Dr Lambrou.**

Please quote reference number NCS201A on all correspondence