Job Description

Lecturer in AI in Biology/Bioinformatics (Education & Research)

Salary: Grade 7 / 8
Contract: Full time, ongoing
School/Department: School of Natural Sciences
Location: Canterbury Campus
Responsible to: Head of School or their nominee

Job purpose

To develop and deliver innovative and engaging teaching to students on programmes in the School, and to undertake internationally excellent research in the subject area. The role will also be responsible for administrative and support activities, working collaboratively towards School and University aims.

The role will contribute to knowledge exchange activities in the discipline as well as learning and teaching on agreed programmes, with research-backed knowledge and expertise in AI in Biology or Bioinformatics.

The role is offered on an Education and Research (E&R) contract, appropriate for candidates with a strong research record and trajectory, contributing high quality outputs in the relevant field, and able to enhance the University's research profile for the subject area.

Biosciences at the University of Kent is a research-intensive community within the School of Natural Sciences, delivering internationally recognised research spanning biochemistry, genetics, biotechnology and biomedical science, with a strong focus on understanding biological processes at the molecular and cellular level. There is also focus on applying research as demonstrated by being ranked second in REF2021 for Impact. The School of Natural Sciences leads multiple regional and national research centres, including the Centre for Advanced Diagnostics Development and Application (CADDA), ELEMENTAL (a UKRI Engineering Biology mission hub) and the Sharing Space for Nature Project. We are seeking an individual who will be able to contribute to Bioinformatics/Computational across both research and teaching, and are particularly interested in those who will use AI to address important biological questions.

Key accountabilities and duties

- Deliver and contribute to the design of high quality, demand-driven and student-centred teaching in a variety of settings, Including developing own teaching and learning support materials, methods and approaches to meet the learning objectives and requirements of the programme.
- Assess students' work, monitor progress and provide feedback and guidance.
- Undertake an independent research programme, including supervision of research staff and students, which contributes to the overall research strategy of the University of Kent.
- Disseminate research findings through various means including writing or contributing to internationally excellent papers in high-quality publications and presentation at conferences, furthering the research profile of the School and the external visibility and reputation of the University of Kent.
- Secure funds through external applications for research grants and contracts, individually or in collaboration with others, to support your research programme, research staff and PhD students.
- Collaborate with internal and external contacts, participate in networks and build external relationships to further develop research.

- Seek ways to improve practice by analysing feedback and reflecting on teaching design and delivery, undertaking pedagogic research and continually updating and applying knowledge in the subject area.
- Play an active role in all aspects of programme development, enhancement and management, including module design and development, curriculum amendments, recruitment and admissions, marketing, student support, planning and quality assurance.
- Act as personal tutor and be responsible for the pastoral care of students within a specified area, provide first line support and refer to services providing further help as appropriate.
- Contribute fully to the School and University, participating in meetings, working groups, committees, and other activities, carrying out administration activities and proactively supporting the EDI agenda and a collegial work environment.
- May be required to engage in consultancy, innovation, knowledge exchange and CPD activity within own discipline, either as part of the base load or, within the University's standard procedures, for separate remuneration.

Internal & external relationships

Internal: Students, academic, technical and administrative colleagues throughout the School, Head of School, and relevant staff across the wider university community.

External: Relevant external organisations and individuals such as collaborative research partners and funding bodies.

Health, safety & wellbeing considerations

This job involves undertaking duties which include the following health, safety and wellbeing considerations:

- Regular use of Screen Display Equipment
- Biological Agents/Scientific Hazards (experiments/lasers etc, and waste/sewage)
- Pressure to meet important deadlines such as might be inherent in high profile projects
- There may be a requirement to work evenings and weekends
- Ability to occasionally travel in a timely and efficient manner between campuses

Person specification

The person specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications will be measured against the criteria published below.

Selection panels will be looking for clear evidence and examples in an application, or cover letter (where applicable), which back-up any assertions made in relation to each criterion.

Essential Criteria:

- Degree or equivalent in Biological Sciences, Computer Science, or other relevant subject area, or equivalent experience (A)
- PhD in Bioinformatics, AI, or relevant discipline, or equivalent experience/qualification (A)
- An emerging record of international excellence in research commensurate with career stage and experience of producing high quality research outputs in leading journals (A,I,T)
- Demonstrable technical competence in Bioinformatics/Computational Biology (A,I,T)
- Sufficient breadth and depth of specialist knowledge in Bioinformatics/Computational Biology to teach within established undergraduate and postgraduate programmes and the capacity to communicate this knowledge effectively to students (A,I,T)
- Sufficient subject knowledge to teach outside own specialisms/elsewhere on the programmes (I)

- Evidence of effective teaching skills appropriate to the development and delivery of undergraduate and postgraduate teaching in the discipline (I,T)
- Ability to develop, deliver and supervise high quality undergraduate and postgraduate research projects in
- the field (I)
- Excellent interpersonal and presentation skills to communicate material of a specialist or highly technical nature and to be effective both orally and in writing at a level appropriate to the activity (I,T)
- Willingness to contribute fully, flexibly and cooperatively as part of the School team (I)
- Willingness to engage in continuous professional development activity (I)
- A firm commitment to fostering a working and learning environment that is respectful, inclusive and values diversity, including diversity of thought, and which enables staff and students from a wide range of backgrounds to thrive (I)

Desirable Criteria:

- A relevant teaching qualification such as PGCHE (candidates without qualification will be supported to obtain one) (A)
- Experience in the development and delivery of undergraduate and postgraduate teaching and assessment in
- Bioinformatics in a higher education setting (A,I,T)
- Experience of collaborative research (A,I)
- Evidence of income generation e.g. through research grants or enterprise activity (A,I)
- Evidence of contributing to outreach, public engagement or enterprise activities within local and/or professional communities (A,I)
- Demonstrated commitment to open research, as appropriate to the discipline, through open data, open code, open educational resources and practices that support replication (I)
- A record of presenting research papers at national and international conferences (A,I)

Assessment stage: A - Application; I - Interview; T - Test/presentation at interview stage