School of Engineering and Informatics
Department of Informatics
Teaching Fellow in Computer Science (fixed term for 4 months, part time 0.3 FTE)
Salary range: starting at £32,004 and rising to £38,183 per annum, pro rata.
Expected start date: 30 January 2017

The School of Engineering and Informatics at the University of Sussex wishes to appoint a four-month fixed-term Teaching Fellow from 30 January 2017, to teach in the Department of Informatics.

The successful candidate will teach a postgraduate module in Adaptive Systems to students at MSc level. He/she will have a PhD in artificial intelligence, computing or a closely related subject, research experience in adaptive systems, and experience of teaching students in higher education.

Informal enquiries may be addressed to Professor Ian Wakeman, Head of the Department of Informatics, at ianw@sussex.ac.uk.

Closing date for applications: 16 December 2016

For full details and how to apply see www.sussex.ac.uk/jobs

The University of Sussex is committed to equality of opportunity

The School is committed to equality and valuing diversity, and currently holds an Athena SWAN Bronze Award. Applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in science and engineering at Sussex.
2. **Senior leadership and management**

The Vice-Chancellor (Professor Adam Tickell) is the senior academic officer and, as Chief Executive, is responsible to the University Council for management of the University. He is supported by an executive group which includes the four Pro-Vice-Chancellors, the Registrar and Secretary, the Director of Finance and the Director of Human Resources. The Heads of the Schools of Studies at Sussex report to the Pro-Vice-Chancellors.

The Registrar and Secretary heads the Professional Services of the University. In addition, under the University Statutes, the Registrar and Secretary is Secretary to the University Council. The Director of Finance reports to the Vice-Chancellor. The Director of ITS reports to the Registrar and Secretary, and the Librarian reports to one of the Pro-Vice-Chancellors.

3. **The School of Engineering and Informatics**

The School of Engineering and Informatics covers the disciplines of computer, electrical and electronic engineering, mechanical, and automotive engineering, product design, digital media, computer science and informatics. Sussex was ranked 19th in the UK in the just released Complete University Guide 2017.

Distinctive characteristics of the School are: creativity, interdisciplinarity, strong links with industry, and an international outlook in both research and teaching. £10m (£4.9m from HEFCE) is being invested in a new Computing, Robotics, Electronics and Mechatronics Centre (CREaM) as a result of a 60% surge in applications for the School's degrees.

The School offers a range of undergraduate and postgraduate degrees in its areas of expertise, often in collaboration with other schools at Sussex, to create a distinctive focus that addresses the needs of industry, commerce and society. Examples include joint degrees with the MSc in Evolutionary and Adaptive Systems (EASY) that includes modules from the Schools of Engineering and Informatics and Psychology; and the MScs in Engineering Business Management, and Management of Information Technology, which were developed in collaboration with the School of Business, Management and Economics.

This interdisciplinary approach also applies to our research, with current and recent externally funded projects with researchers in a wide range of other subject areas including: geomorphology, media practice, medical imaging, neuroscience, anthropology, English literature, epidemiology, geography, international development, mathematics, psychiatry, psychology and sociology.

The School has strong links with industry, and has an established Strategic Advisory Board. Innovative research across the School has led to a number of patents which are being commercialised including: novel electric potential sensors (EPS) licensed to Plessey Semiconductors and marketed as the EPIC sensor chip; and University spin-out companies, including TribeHive, which is deploying delay-tolerant networking to provide smartphone connectivity in large crowds, and TexRAD, which has developed software for the analysis of medical images and has recently demonstrated the ability to detect brain texture anomalies in Asperger’s Syndrome patients. These developments have been supported by the University’s Enterprise fund. The EPS sensor technology was awarded the IET Innovation award for ‘Measurement in Action’, and was shortlisted for two other IET categories and for a THES award.

The School is, for administrative purposes, comprised of two departments: the Department of Informatics and the Department of Engineering and Design. Staff teach across the School, and undertake research on cross-School, as well as cross-University projects.
Following a recent Professorial appointment, the School has just launched a major new School-wide research group in **Creative Technology**.

The Group brings together a number of academics working in the areas of human-centred technology, product design, experience design, tangible and physical computing, games, digital media, digital cultural heritage, child-computer interaction, broadcast technologies and social innovation.

### 3.1 Department of Informatics

The Department of Informatics is highly rated for its teaching and research. Its researchers work in an environment that was deemed to be wholly 4*/3* (world-leading/ internationally excellent) in the REF 2014.

Sussex was ranked in the top 25 in the UK in The Guardian University Guide 2014. Our students are highly employable: in early 2014, 95% of our previous year's graduates were employed, and of those, 100% were in professional or managerial jobs.

The Department maintains a strong emphasis on interdisciplinary teaching and research, and has substantive links with almost all other Schools of study at Sussex. Its research spans the theoretical and applied.

The Department’s research is organised into three groups:

- Data Science ([www.sussex.ac.uk/calps/](http://www.sussex.ac.uk/calps/))
- Evolutionary and Adaptive Systems ([www.sussex.ac.uk/easy/](http://www.sussex.ac.uk/easy/))
- Foundations of Software Systems ([www.sussex.ac.uk/foss/](http://www.sussex.ac.uk/foss/)),

and also plays leading roles in cross-disciplinary research centres:

- Sackler Centre for Consciousness Science ([www.sussex.ac.uk/sackler/](http://www.sussex.ac.uk/sackler/))
- Centre for Computational Neuroscience and Robotics (CCNR) ([www.sussex.ac.uk/ccnr/](http://www.sussex.ac.uk/ccnr/))
- Centre for Cognitive Science (COGS) ([www.sussex.ac.uk/cogs/](http://www.sussex.ac.uk/cogs/))
- Sussex Neuroscience ([www.sussex.ac.uk/sussexneuroscience/](http://www.sussex.ac.uk/sussexneuroscience/)).

The Department has long-standing collaborations with a range of external organisations including Animazoo, the Clinical Practice Research Datalink, and American Express, which has sponsored over 120 MSc students in Informatics over the past 10 years.

The Department currently has 420 undergraduates, 80 taught postgraduates, and 60 doctoral students. Undergraduate courses, accredited by the relevant professional institutions where appropriate, and have an industrial placement year option, include:

- MComp (Hons) / BSc (Hons) Computer Science
- BSc (Hons) Computer Science and Artificial Intelligence
- BSc (Hons) Computing for Business and Management
- BSc (Hons) Computing for Digital Media
- BSc (Hons) Games and Multimedia Environments
- MEng (Hons) / BEng (Hons) Computer Engineering *(a cross-School course between the Department of Informatics and the Departments of Engineering and Design).*

The Department’s masters level courses are in the process of being reviewed as part of a cross-School process, the courses currently include:

- MSc Advanced Computer Science
MSc Computing with Digital Media
MSc Data Science
MSc Evolutionary and Adaptive Systems
MSc Human-Computer Interaction
MSc Information Technology with Business and Management
MSc Intelligent Systems
MSc Management of Information Technology.

Detailed information about the Department can be found at [www.sussex.ac.uk/informatics](http://www.sussex.ac.uk/informatics)

### 3.2 Department of Engineering and Design

The Department of Engineering and Design has a strong reputation for excellence in research and teaching. Its research outputs were rated as 88%, and impact as 90% 4*/3* (world-leading/internationally excellent) in the REF 2014. In the 2014 NSS engineering students registered an 86% satisfaction level with respect to learning resources. Mechanical Engineering ranked 15th for graduate prospects, in the Complete University Guide 2015 and an overall ranking of 18th in the just released 2016 Guardian University Guide; with Electrical Engineering ranked 14th for student satisfaction in the Complete University Guide 2014.

The Department’s students won the automotive category of the Telegraph UK STEM Awards 2014 sponsored by McLaren Group (link to video).

Research activity is focused on mechanical engineering (turbomachinery, dynamics and control, and tribology); and electronic engineering (sensor technology, image and signal processing, and mobile digital communications). There are strong collaborations with industry, including Jaguar Land Rover, General Electric, Plessey Semiconductors and Meggitt Sensing Systems.

The Department’s research is organised into four groups:

- **Dynamics, Control and Vehicle Research Group** ([www.sussex.ac.uk/dcv](http://www.sussex.ac.uk/dcv))
- **Industrial Informatics and Signal Processing Research Group** ([http://www.sussex.ac.uk/iisp/](http://www.sussex.ac.uk/iisp/))
- **Sensor Technology Research Centre** ([www.sussex.ac.uk/strc/](http://www.sussex.ac.uk/strc/))
- **Thermo-Fluid Mechanics Research Centre** ([http://www.sussex.ac.uk/tfmrc/](http://www.sussex.ac.uk/tfmrc/))

The Department currently has 495 undergraduate students, 62 taught postgraduate students, and 43 postgraduate research students.

The Department’s undergraduate courses, all of which are accredited and have an industrial placement year option, include:

- MEng (Hons) / BEng (Hons) Automotive Engineering
- MEng (Hons) / BEng (Hons) Computer Engineering (*a cross-School course between the Departments of Engineering and Design and the Department of Informatics*)
- MEng (Hons) / BEng (Hons) Electrical and Electronic Engineering
- MEng (Hons) / BEng (Hons) Mechanical Engineering
- BSc (Hons) Product Design.

The Department’s masters level courses, the majority of which are also accredited, are in the process of being reviewed as part of a cross-School process, the courses currently include:

- MSc Advanced Mechanical Engineering
MSc Digital Communication Systems
MSc Embedded Digital Systems
MSc Engineering Business Management
MSc Robotics and Autonomous Systems

Detailed information about the Department can be found at www.sussex.ac.uk/engineering
CORE JOB DESCRIPTION

Job Title: Teaching Fellow in Computer Science
Grade: Grade 7
School: Engineering and Informatics
Location: University of Sussex Campus
Responsible to: Head of School
Direct reports: n/a
Key contacts: Students, other members of Faculty within the School and University, School Officers, academics in the field in other institutions.
Role description: Teaching Fellow is an early career-grade teaching position. Post-holders will be expected to teach in a developing capacity.

PRINCIPAL ACCOUNTABILITIES

1. To deliver and contribute to the design of high-quality teaching programmes to attract students.

2. To contribute fully to the School and University by participating in meetings, working groups, committees and other School and University activities.
KEY RESPONSIBILITIES

1. Teaching & Student Support

1.1 Contribute to the planning, delivery and assessment of high-quality undergraduate and postgraduate teaching, in liaison with the relevant programme and course convenors.

1.2 Contribute to the development, design and management of courses and new curriculum proposals that are attractive to students.

1.3 Ensure that teaching content, methods of delivery and learning materials will meet the defined learning objectives, including the use of appropriate technology.

1.4 Set, mark, and assess coursework and examinations; select appropriate assessment instruments and assessment criteria; and provide constructive and comprehensive feedback to students.

1.5 Ensure that teaching materials remain up-to-date and relevant, incorporating advances in the subject area into the course of study.

1.6 Develop and maintain an understanding of appropriate pedagogy in the subject area and respond to challenges.

1.7 Supervise the work of undergraduate and taught postgraduate students, providing them with advice on study skills, projects, fieldwork and placements.

1.8 Undertake and complete administrative duties required in the professional delivery of teaching.

1.9 Make a significant contribution to the accreditation of courses and quality-control processes.

1.10 Undertake academic advising duties, and provide first-line support for sensitive issues, referring on as appropriate to services providing further assistance.

1.11 Adopt an approachable and accessible attitude towards students, offering office hours, informal advice etc.

1.12 Transfer knowledge in the form of practical skills, methods and techniques.

1.13 Supervise the work of students, provide advice on study skills and help them with learning problems.

2. Scholarship & Enterprise

2.1 Continually updated knowledge and understanding in field or specialism, and engage in continuous professional development
3. **Contribution to School & University**

3.1 Attend and contribute to School meetings.

3.2 Engage in activities beyond day-to-day teaching duties, for example Admissions Days.

3.3 Assist with undergraduate and postgraduate recruitment.

3.4 Participate in School or University working groups or committees, as required.

3.5 Undertake additional administrative duties, as required by the Head of School.

4. **Role-specific duties**

4.1 Lead, teach and assess a postgraduate module in adaptive systems to MSc students.

This Job Description sets out current duties of the post that may vary from time to time without changing the general character of the post or level of responsibility entailed.
INDICATIVE PERFORMANCE CRITERIA

- Proven and sustained track record of successful teaching at the levels appropriate for the post.
- Evidence of skill in assessment and feedback techniques, and using a range of methods for evaluating the effectiveness of teaching.
- Demonstrable contribution to the planning and development of courses.
- Delivering a teaching load in line with School expectations.
- Evidence of applying knowledge arising from scholarship to enhance teaching practice.
- Evidence of active engagement in advising students and proactively responding to problems experience by students.
- Completion, within a reasonable period of time, of a recognised higher education teaching qualification.
- Efficient and effective contribution to academic support duties within the School or the University.
PERSON SPECIFICATION

ESSENTIAL CRITERIA

1. Educated to doctoral level, or other equivalent qualification, or appropriate level of experience, as appropriate to the discipline (see role-specific criteria below).

2. Excellent interpersonal skills, with the ability to engage with students using a variety of teaching methods.

3. Experience of teaching or delivering professional training.

4. Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.

5. Ability to work individually on own initiative and without close supervision, and as part of a team.

6. Ability to exercise a degree of innovation and creative problem-solving.

7. Excellent organisational and administrative skills.

8. Ability to prioritise and meet deadlines.

9. A willingness to participate in student support activities beyond required teaching duties.

10. Excellent IT skills, with the ability to produce high-quality, inclusive learning materials.

ESSENTIAL ROLE-SPECIFIC CRITERIA

1. A PhD in computing, or a closely related subject.

2. Research experience in adaptive systems or a closely related area.

3. Experience of teaching computing in higher education.

DESIRABLE CRITERIA

1. A recognised higher education teaching qualification.

2. Experience of teaching in higher education.

3. Membership of professional body, if appropriate.