JOB DESCRIPTION

Lecturer in Computing

Imperial College London, one of the world’s most important centres for research and teaching in the Natural and Physical Sciences, Medicine, Engineering, and Business, seeks Lecturers to join the Department of Computing within the Faculty of Engineering.

Imperial College London is consistently rated amongst the world's best universities. Imperial is committed to developing the next generation of researchers, scientists, and academics through collaboration across disciplines.

Located in the heart of London, Imperial is a multidisciplinary space for education, research, translation, and commercialisation, harnessing science and innovation to tackle global challenges.

Imperial has four academic faculties – Engineering, Medicine, and Natural Sciences and the Imperial College Business School, as well as a considerable number of interdisciplinary research centres focusing on challenging world problems.

Imperial has a leadership model comprising the President, Professor Hugh Brady, and the Provost, Professor Ian Walmsley FRS.

Please refer to further particulars for more information about the College.

1. The Post

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Lecturer (Assistant Professor) in Computing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department/Division:</td>
<td>Computing</td>
</tr>
<tr>
<td>Faculty:</td>
<td>Engineering</td>
</tr>
<tr>
<td>Campus location:</td>
<td>South Kensington</td>
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<tr>
<td>Job Family/Level:</td>
<td>Academic, Lecturer</td>
</tr>
<tr>
<td>Accountable to:</td>
<td>Head of Department of Computing</td>
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<tr>
<td>Responsible to:</td>
<td>Head of Department of Computing</td>
</tr>
<tr>
<td>Key working relationship (Internal):</td>
<td>Teaching Fellows, Academics</td>
</tr>
<tr>
<td>Key working relationship (external):</td>
<td>As required</td>
</tr>
<tr>
<td>Working hours:</td>
<td>As reasonably necessary but normally not less than 35 hours per week</td>
</tr>
<tr>
<td>Contract type:</td>
<td>Full-time Open ended</td>
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2. Background of the post

The Department of Computing at Imperial College London is a leading department in Computer Science. Its excellence in research is demonstrated by the UK REF 2021 results, where our department was rated top not just in our discipline.
We wish to appoint Lecturers (Assistant Professors) in 2023 to strengthen our existing research areas and build up new research capacity in areas of strategic interest. Appointments at the Senior Lecturer (Associate Professor) level are possible for suitably qualified candidates.

In the Department of Computing, we offer a competitive salary and an attractive start-up package to newly appointed Lecturers to support them in establishing their research group. Elements of a start-up package are negotiated with the Head of Department. We also are eager to help with and support dual-career needs that our offer holders may have.

Our department is a co-lead in the College's I-X initiative, a new collaborative environment for research, education, and entrepreneurship across artificial intelligence (AI), data science, and digital technologies. This is therefore an exciting time to join the Department of Computing to co-shape the future of research and education in our field.

Appointed Lecturers are encouraged to contribute to the I-X initiative in their area of expertise - benefitting from the rich and stimulating environment that this provides on our South Kensington and White City campuses. Computing, the Faculty, and the College will use I-X as a laboratory for the university of the future – situated in one of the great cities of the world.

The Department of Computing has strong links and collaborations with industry, which ensures economic and social impact of our research and teaching. We encourage entrepreneurship, which led to a portfolio of start-ups, many were acquired by leading technology companies.

The Department of Computing values research in the foundational underpinnings of our discipline, transdisciplinary research, and digital innovation. We will consider strong applications for all our research themes and for all areas of Computing, including Safe or Explainable Artificial Intelligence, Software Engineering for Data Science, Quantum Computing, Human-Computer Interaction & Socio-Technical Systems, Computer Vision, and Natural Language Processing.

3. Information about the Faculty of Engineering

The Faculty of Engineering is one of four faculties within Imperial College London and is led by the Dean, Professor Nigel Brandon OBE FREng FRS. The Faculty seeks to provide international leadership in engineering research and education and is widely recognised as a world-leading engineering school. Our departments consistently excel in prominent league table rankings, while the College enjoys similar success. Our Faculty is unique in the UK in supporting world-class education and fundamental research across the full range of engineering disciplines. All ten of our academic departments are located on a single campus in South Kensington, giving a concentration of talent that creates a stimulating and vibrant research culture which promotes multidisciplinary collaborations and attracts internationally leading researchers and scholars.

Our academic departments deliver world-class education in engineering in order that our graduates possess the skills, knowledge, and attitudes necessary to become international leaders in engineering industry and academia. We provide our students with an outstanding engineering education, which brings together cutting-edge researchers, exceptional teachers, and state-of-the-art facilities in inspiring physical and virtual environments. Students at Imperial will meet, work and live with people studying every aspect of engineering.
The Faculty is home to 1,740 staff (440 academics, 800 researchers and 500 support staff) and 8,000 students (of whom around 1,500 are research students). The Faculty is a powerhouse in research across the engineering sciences, with research funding more than £100m per year.

The Faculty of Engineering is based at the South Kensington and White City campuses and comprises ten Departments covering all aspects of Engineering:

- Aeronautics
- Bioengineering
- Chemical Engineering and Chemical Technology
- Civil and Environmental Engineering
- Computing
- Design Engineering
- Earth Science and Engineering
- Electrical and Electronic Engineering
- Materials
- Mechanical Engineering

The Faculty was formed in August 2001 and formally inaugurated in August 2002.

4. The Department of Computing

Our Department of Computing prides itself in its research-led education environment that values and invests in people. We conduct world-class research and transfer this research into our teaching. We are privileged to have such talented students and to educate them to become future leaders in ICT, Engineering, and industry verticals.

4.1 Staffing and size of the Department

Our people strategy has Equality, Diversity, and Inclusion are a core principle. We value courage, excellence, integrity, respect, and collaboration and offer newly appointed Lecturers an environment in which they can shape their own research agendas and realize their career ambitions.

The Department of Computing has over sixty academics, more than a dozen teaching fellows, 30 professional support staff, over two hundred research staff, and over one thousand taught and research students.

We are eager to increase our percentage of women students and women academics and want to further improve the diversity of our staff and student population.
4.2 Research

Our research environment is structured around research themes that reflect the breadth and depth of our world-leading academics, post-doctoral researchers, and PhD students. We have extensive industry collaborations with leading global companies, SMEs, and start-ups across many sectors. Several of our academics work in industry, create their own start-ups that make successful acquisition exits, or hold prestigious Research Fellowships or Research Chairs - attesting to the vibrancy of our research.

Each research theme has several research groups that provide the infrastructure for targeted research and support for PhD students and post-doctoral researchers. Academics are not limited to just one theme and many work collaboratively across a few themes. The themes are Artificial Intelligence, Data Science, Programming Languages, Security, Software Engineering, Systems, Theory and Algorithms, Analysis and Verification, and Visual Computing.

4.3 Education

The Department of Computing offers undergraduate and postgraduate taught degrees and postgraduate research degrees:

**BEng/MEng Computing**: The Computing courses are held within the Department of Computing. The MEng courses are of four-year duration and lead to the MEng Honours degree of Imperial College and the Associateship of the City and Guilds of London Institute (ACGI). The BEng course is of three-year duration and leads to the BEng Honours degree of Imperial College and the Associateship of the City and Guilds of London Institute (ACGI).

**BEng/MEng Joint Mathematics and Computer Science**: The Mathematics and Computer Science (JMC) courses are offered jointly by the Department of Computing and the Department of Mathematics. The MEng courses are of four-year duration and lead to the MEng Honours degree of Imperial College and the Associateship of the City and Guilds of London Institute (ACGI). The BEng course is of three-year duration and leads to the BEng Honours degree of Imperial College and the Associateship of the City and Guilds of London Institute (ACGI).

Our taught postgraduate degrees are the MSc Computing, MSc Advanced Computing, MSc Artificial Intelligence, and five Specialist Degrees.

We offer an MRes AI and Machine Learning as well as Integrated MRes/PhD Degrees.

Our department is fortunate to have a dedicated team of Teaching Fellows who work with our research staff and academics to provide high-quality and student-focused teaching and outreach activities. Our Administrative Staff and
departmental Computing Support Group ensure that our teaching, research, and outreach activities continue to run efficiently and effectively.

4.4 Relationship with other departments and faculties

The Department of Computing collaborates with many other departments and faculties. As mentioned, we co-lead the new strategic I-X initiative that pioneers new ways of researching, collaborating, teaching, and innovating, specifically around artificial intelligence (AI), machine learning and data science. We have also strong collaborations with other engineering departments such as the Department of Electrical and Electronic Engineering and with departments in the Business School, the Faculty of Medicine, and the Faculty of Natural Sciences.

These collaborations are focused on research, education, transfer, and innovation. Within the scope of the I-X initiative, we are eager to expand our teaching collaborations with the Business School – for example in the space of AI topics.

5. THE POST – KEY RESULT AREAS, MAIN DUTIES AND RESPONSIBILITIES

5.1 Research

- To develop a broad range of research within the department.
- To direct, lead, or contribute to, a research area at the highest scientifically rigorous levels.
- To supervise, train and mentor research staff and students at the highest scientifically rigorous levels.
- To obtain funds and research grants and to encourage and (where appropriate) guide junior research staff to do the same.
- To manage research projects.
- To write reports for research sponsors and to take part in audits.
- To publish high quality research in peer reviewed journals.
- To attend and present work at national and international conferences.
- To develop contacts with other research organisations, both academic and commercial.
- To collaborate with and strengthen links with colleagues within the Faculty of Engineering across all departments and contribute to the work of the Faculty and College.
- To play a role in the national and international research community and learned societies.
- To attend and contribute to research and administrative meetings within the Department as and when requested.
- To foster scientific collaborations through organising, attending, and contributing to multidisciplinary meetings, within the Department and with other appropriate parties at Imperial.

5.2 Education - Teaching and Training

- To teach and examine courses at all levels – undergraduate, masters and higher research degrees – through lectures, seminars, tutorials, course work and personal supervision.
- To plan and review own approach to teaching.
• To act as a coach and role model through excellent practice and mentoring of colleagues.
• To supervise PhD candidates.
• To provide pastoral support for students.
• To contribute to curriculum development.
• To take a leading role in, or contribute to, the development of teaching and teaching methods and assessment.
• To contribute to the enhancement of quality teaching within the field.
• To act as an external examiner for postgraduate students.
• To work with national bodies on curriculum development and quality assurance.

5.3 Strategy and Business Planning
• To participate in the business planning and objective setting process for the academic team and the departments
• To make a significant contribution to building and establishing links between the appropriate departments and colleagues in other parts of Faculty and wider College.
• To play an active part in the strategic planning of financial, staff and research resources.
• To represent the Department, Faculty and College at external meetings, as appropriate.

5.4 Leadership and Team Working
• To demonstrate excellent leadership skills regarding individual performance, academic teams, the department, Faculty, College, and when participating in national/international initiatives.
• To work collaboratively with all members of the multi-disciplinary team and the College as required.
• To resolve conflict and difficult situations through negotiation and discussion, involving appropriate parties.
• To adhere to College guidelines on leave including reporting absence.

5.5 Management and Administrative duties
• To play an active part in or contribute to the management of financial, staff and research resources, in line with College policy and procedure.
• To play a supportive role in unit administration, as appropriate.
• To undertake appropriate administrative tasks in support of the department’s teaching and research activities.
• To attend relevant academic or management committees.
• To comply with the College’s Equal Opportunities policy, Health and Safety policy and other College and departmental policies.
• To undertake other appropriate administrative duties commensurate with the grade of the post.

5.6 Staff Management
• To take responsibility for the appointment, management, and development of College staff, in line with College policy and procedure.
• To participate in team objective setting as part of the annual job planning cycle.
• To be responsible for the annual appraisal of staff who report to the post holder (Performance Review and Development Plan or PRDP).
6. APPRAISAL AND PERFORMANCE REVIEW SYSTEMS AND MENTORING

The purpose of the appraisal and performance review systems is to review performance and development needs. Staff are required to participate in these schemes when requested to do so by the Head of Department and Personal Review and Development Plans are conducted on an annual basis in conjunction with the line manager.

7. OFFICE/ADMINISTRATIVE FACILITIES/OTHER

The post holder will have office facilities, including computer with internet access, and access to administrative support at South Kensington and/or White City campus.

Imperial College is committed to equality of opportunity and to eliminating discrimination. All employees are expected to follow the 7 Imperial Expectations detailed below:

1. Champion a positive approach to change and opportunity
2. Encourage inclusive participation and eliminate discrimination
3. Communicate regularly and effectively within and across teams
4. Consider the thoughts and expectations of others
5. Deliver positive outcomes
6. Develop and grow skills and expertise
7. Work in a planned and managed way

Employees are also required to comply with all College policies and regulations paying special attention to:

- Confidentiality
- Conflict of Interest
- Data Protection
- Equal Opportunities
- Financial Regulations
- Health and Safety
- Information Technology
- Smoking
- Private Engagements and Register of Interests

All employees are expected to adhere to the principles set out in its Equal Opportunities in Employment Policy, Promoting Race Equality Policy and all other relevant guidance/practice frameworks. They must also undertake specific training and assume responsibility for safety relevant to specific roles, as set out on the College Website Health and Safety Structure and Responsibilities page.

Job descriptions cannot be exhaustive, and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

The College is a proud signatory to the San-Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published. For more information, see [www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/](http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/)

The College believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes where their use is
shown to be necessary for developing new treatments and making medical advances. Imperial is committed to ensuring that, in cases where this research is deemed essential, all animals in the College’s care are treated with full respect, and that all staff involved with this work show due consideration at every level: Find out more about animal research at Imperial.

We are committed to equality of opportunity, to eliminating discrimination and to creating an inclusive working environment for all. We therefore encourage candidates to apply irrespective of age, disability, marriage or civil partnership status, pregnancy or maternity, race, religion and belief, gender identity, sex, or sexual orientation. We are an Athena SWAN Silver Award winner, a Disability Confident Leader and a Stonewall Diversity Champion.
8. PERSON SPECIFICATION

Applicants will be assessed against the following person specifications, considering the level of the position for which they are applying:

E – Essential: Requirements without which the job could not be done.
D – Desirable: Requirements that would enable the candidate to perform the job well.

<table>
<thead>
<tr>
<th>Requirements - Lecturer</th>
<th>Essential (E) and Desirable (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
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<tr>
<td>• PhD in Computer Science or related field or equivalent</td>
<td>E</td>
</tr>
<tr>
<td>• A developing national reputation and expertise in the field of Computer Science or related field</td>
<td>E</td>
</tr>
<tr>
<td><strong>Knowledge and Experience</strong></td>
<td></td>
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<tr>
<td>• Evidence of contribution to the development and performance of colleagues through coaching and mentoring</td>
<td>D</td>
</tr>
<tr>
<td>• Experience of preparing grant applications for submission</td>
<td>D</td>
</tr>
<tr>
<td>• A portfolio of research publications, confirming national standing (commensurate with career stage)</td>
<td>E</td>
</tr>
<tr>
<td>• Experience of training Undergraduate and Postgraduate students</td>
<td>D</td>
</tr>
<tr>
<td>• Experience of (co)supervision of higher degrees (PhD)</td>
<td>D</td>
</tr>
<tr>
<td><strong>Skills and Abilities</strong></td>
<td></td>
</tr>
<tr>
<td>• Ability to communicate well, conveying ideas and concepts clearly and effectively</td>
<td>E</td>
</tr>
<tr>
<td>• A high level of analytical capability</td>
<td>E</td>
</tr>
<tr>
<td>• Ability to develop skills in leading, motivating, developing and managing the performance of colleagues</td>
<td>E</td>
</tr>
<tr>
<td>• Good leadership skills</td>
<td>E</td>
</tr>
<tr>
<td>• Ability to work under pressure</td>
<td>E</td>
</tr>
<tr>
<td>• Good organisational and management skills</td>
<td>E</td>
</tr>
<tr>
<td>• Ability to work within a multidisciplinary team</td>
<td>E</td>
</tr>
<tr>
<td>• Collaborative and able to build and sustain effective working relationships, both internally and externally</td>
<td>E</td>
</tr>
<tr>
<td><strong>Personal attributes for all levels</strong></td>
<td>Essential (E) and Desirable (D)</td>
</tr>
<tr>
<td>• A willingness to undertake any necessary training and development activities for the role</td>
<td>E</td>
</tr>
</tbody>
</table>
Personal attributes for all levels

<table>
<thead>
<tr>
<th>Essential (E) and Desirable (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The understanding and vision required to contribute to the setting and delivery of strategic goals.</td>
</tr>
<tr>
<td>A willingness to engage in collaborative research</td>
</tr>
<tr>
<td>A commitment to high quality teaching and fostering a positive learning environment for students</td>
</tr>
<tr>
<td>A commitment to work as part of a team in assisting the smooth running of the Group and its research and teaching programmes</td>
</tr>
<tr>
<td>A personal commitment to the vision and values of the College, including high quality teaching and research.</td>
</tr>
<tr>
<td>Supportive and tolerant</td>
</tr>
<tr>
<td>A willingness to undertake any necessary training and development activities for the role</td>
</tr>
</tbody>
</table>

9. SALARY AND CONDITIONS OF SERVICE

A full set of terms and conditions will be given to the successful candidate, together with the College’s most important policies, which affect staff. The principal terms and conditions are as follow:

Lecturers

The post will be in the Lecturer level of the Academic Job Family. Appointments at the Senior Lecturer level are possible for suitably qualified candidates.

The Department of Computing offers a competitive salary and an attractive start-up package to newly appointed Lectures to support them in their establishment of a research group. Elements of a start-up package are negotiated with the Head of Department. We also are eager to help with and support dual-career needs that our offer holders may have.

Incremental progression and any performance payments will be in accordance with procedures governing Lecturer level in the Academic Job Family. Annual increment date is 1 October up to the maximum of the standard salary scale. For those starting between 2 April – 30 September, subject to satisfactory performance, the first increment will be on the first of the month after six months in post.

Annual cost of living increases will be determined by Imperial College through its local collective bargaining machinery.

Salaries are payable on the 24th day of each month (the exception being December) by transfer to a bank or building society account. Deductions in respect of income tax and National Insurance contributions will be made from salaries at the statutory rates.

Academic staff normally take annual leave during College vacations and by arrangement with the Head of Department in the light of academic and departmental requirements.
leave entitlement is 39 days for full time staff (pro rata entitlement for part time staff). This is inclusive of 8 days for Public holidays and a total of six days each year when the College is closed over Easter and Christmas.

In some years, because of the day of the week on which Christmas day falls, a decision may be made to increase the College closure to seven days. In these circumstances the annual leave entitlement will be increased to 40 days for full-time staff (again pro-rata for part-time staff).

At the beginning of the leave year staff will be required to allocate the appropriate number of days of their mandatory leave entitlement to cover the College Closure days and Public holidays that fall within that leave year. For part-time staff the allocation should cover their normal working days that fall upon a College closure day, bank or public holiday during that leave year.

The occupational pension scheme is the Universities Superannuation Scheme (USS). Staff members who are already members of the Federated Superannuation System for Universities (FSSU) or the National Health Service Superannuation Scheme (NHSPS) may, if they are still eligible, retain their membership in these schemes.

Unless stated otherwise in the offer of employment, or agreed by the head of department, the appointment may be terminated by either side by giving a minimum of three months’ notice in writing. For academic members of staff who wish to give notice of their intention to resign from the College the last day of service should fall on one of the following dates: 31 December; 31 March; 30 June or 30 September or at the end of a term by agreement with the Head of Department.

All staff have a probationary period of six months, with the exception of Assistant Professors, Non-Clinical Lecturers and Senior Lecturers (Clinical and Non-Clinical) who normally serve three years. Clinical Lecturers normally serve one year.

Staff on a fixed term contract receive notice of the ending of their employment within that contract. No further contractual notice will be given unless the contract is to terminate prior to the end date specified in the offer of employment. In these circumstances the notice from the College would be as above.

10. APPLICATIONS

Our preferred method of application is online, on our website at the following link: Imperial Career’s site (select “Job Search”). Please apply online, uploading any relevant supporting documents such as a cover letter, full CV, which should include:

- degrees (including universities and dates);
- past and present posts, list of publications;
- brief description of current and future research plans;
- teaching statement and evidence of teaching scores;
- information on research grants and contracts which have been obtained, student supervision, etc;
- information regarding public engagement undertaken with research activities. Examples include: participating in festivals, working with cultural venues; creating opportunities for the public to inform research; researchers and the public working
together to inform policy; citizen researchers and web-based experiments, public debates, etc.

All candidates will be contacted after the shortlisting is completed.