

<b>Job Title:</b>	(Post-Doctoral) Research Associate/Assistant
<b>Department/Division/Faculty:</b>	Electrical and Electronic Engineering
<b>Campus location:</b>	South Kensington
<b>Job Family/Level:</b>	Research / Research Associate*
<b>Salary Range:</b>	£43,093 - £50,834
<b>Responsible to:</b>	Prof Geoffrey Li (Geoffrey.Li@imperial.ac.uk)
<b>Key Working Relationships (internal):</b>	<ul style="list-style-type: none"> <li>• Prof Geoffrey Li</li> <li>• ITP Lab in the EEE Dept., the Imperial College London;</li> <li>• International collaborators</li> <li>• Industry partners.</li> </ul>
<b>Contract type:</b>	Three-year fixed term appointment, extendable up to 5 years depending on performance and funding availability

### Purpose of the Post

- The post is to recruit researchers for “Intelligent Transmission and Processing Lab (ITP Lab)” directed by Prof Geoffrey Li, which focuses on exploiting machine learning for signal processing and wireless communications
- Other aspects of the post include undertaking project management, collaborate with academic and industry partners and/or supervise multi-disciplinary teams.
- In addition, the Research Associate will be expected to submit publications to refereed journals and to attract external research funding.

### Research Duties

- To take initiatives in the planning of research
- To direct the work of small research teams
- To ensure the validity and reliability of data at all times
- To maintain accurate and complete records of all findings
- To write reports for submission to research sponsors
- To present findings to colleagues and at conferences
- To submit publications to refereed journals
- To provide guidance to staff and students
- To attend relevant workshops and conferences as necessary
- To develop contacts and research collaborations within the College and the wider community
- To promote the reputation of the group, the Department and the College
- To provide guidance to PhD Students
- Contribute to bids for research grants
- To conduct and plan own scientific work with appropriate supervision
- To actively participate in the research programme of the group
- To publish in high-quality journals and to present research results at national and international meetings
- To participate in group research meetings and internal seminars
- To collaborate with other allied scientists within Imperial College and elsewhere in London and abroad, as appropriate
- Assist in the supervision of undergraduate and postgraduate research students and research assistants as required
- To comply with the College, Department and group safety practices and to attend courses on safety when appropriate
- Any other duties as may be deemed reasonable by the post holder's supervisor, Head of Group and Head

## Job Description

of Department

- **\*Candidates who have not yet been officially awarded their PhD will be appointed as a Research Assistant within the salary range £39,000- £42,000 per annum.**

Where Imperial or funder conditions necessitate, you will be required to complete timesheets for your work on projects in a timely manner.

### Other Duties

- To undertake any necessary training and/or development
- To undertake appropriate administration tasks
- To attend relevant meetings
- To undertake [Business Continuity responsibilities](#) relevant to individual roles

To observe and comply with all College policies and regulations, including the key policies and procedures on Confidentiality, Conflict of Interest, Data Protection, Equal Opportunities, Financial Regulations, Health and Safety, Imperial Expectations (for new leaders, managers and supervisors), Information Technology, Private Engagements and Register of Interests, and Smoking.

To undertake specific safety responsibilities relevant to individual roles, as set out on the College Website Health and Safety Structure and Responsibilities page (<http://www3.imperial.ac.uk/safety/policies/organisationandarrangements>).

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

Imperial College is committed to equality of opportunity and to eliminating discrimination. All employees are expected to adhere to the principles set out in our Equal Opportunities in Employment Policy, Promoting Race Equality Policy and Disability Policy and all other relevant guidance/practice frameworks.

Person Specification	
Requirements	Essential (E)/ Desirable (D)
Candidates/post holders will be expected to demonstrate the following	
<b>Education</b>	
Hold a PhD (or equivalent) in the general area of (a) Machine Learning, (b) Statistical Signal Processing, (c) Wireless Communications, (d) Applied Mathematics, or a closely related discipline or equivalent research or industrial experience. The candidates with experience in hardware implementation are strongly encouraged.	E
NB: those nearing completion of a PhD (or equivalent) in the area will be also considered. If successful they will be appointed at Research Assistant level (£33,380 - £35,061) and then promoted to Research Associate level upon the award of their PhD	
<b>Experience</b>	
Practical experience within a research environment and / or publication in relevant and refereed journals	E
Experience of dealing with specific groups of people, e.g. industry, sponsors, patients.	D
Practical experience in a broad range of techniques, including, <ul style="list-style-type: none"> <li>• optimisation and signal processing systems.</li> <li>• wireless systems</li> <li>• semantic communications</li> </ul>	D
<b>Knowledge</b>	

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Knowledge in at least two areas of, <ul style="list-style-type: none"> <li>• applied math</li> <li>• machine learning</li> <li>• statistical signal processing</li> <li>• wireless communications</li> <li>• semantic communications</li> </ul> Willingness to explore new ideas from other fields is a must.	E
Knowledge of research methods and statistical procedures.	E
<b>Skills &amp; Abilities</b>	
Ability to conduct a detailed review of recent literature	E
Ability to develop and apply new concepts	E
Creative approach to problem-solving	E
Excellent verbal communication skills and the ability to deal with a wide range of people	E
Excellent written communication skills and the ability to write clearly and succinctly for publication	E
Ability to direct the work of a small research team and motivate others to produce a high standard of work	E
Ability to organise own work with minimal supervision	E
Ability to prioritise own work in response to deadlines	E
Advanced computer skills, including word-processing, spreadsheets and the Internet	E
<b>Other</b>	
Willingness to work as part of a team and to be open-minded and cooperative	E
Flexible attitude towards work	E
Discipline and regard for confidentiality and security at all times	E
Willingness to undertake any necessary training for the role	E
Willingness to travel both within the United Kingdom and abroad to conduct research and attend conferences	E
Willingness to work out of normal working hours (including weekends) if the requirements of the project demand	E

Please note that 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.

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
- Financial Regulations
- Private Engagements and

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- Conflict of Interest
- Data Protection
- Equal Opportunities

- Health and Safety
- Information Technology
- Smoking

Register of Interests

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.

*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 <https://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.*

*<http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/animal-research/>*

*Committed to equality and valuing diversity, we are an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Disability Confident Employer and work in partnership with GIRES to promote respect for trans people.*