THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

FACULTY OF SCIENCE & ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE

LECTURER OR SENIOR LECTURER IN MACHINE LEARNING

VACANCY REF: SAE-018697

Salary:	Grade 7, £42,149 to £51,799 or Grade 8, £53,348 to £63,668 per annum, depending on relevant experience
Hours:	Full time
Duration:	Permanent
Location:	Sackville Street, Manchester

Enquiries about the vacancy, shortlisting and interviews:
Name: Professor Samuel Kashi
Email: Samuel.kaski@manchester.ac.uk

The University of Manchester
The University of Manchester is the largest single-site university in the UK, with the biggest student community. In total, 25 Nobel Prize winners have worked or studied here. The campus, at the heart of the city, is alive with student activity day and night. We are ranked 33rd in the world and sixth in the UK in the 2019 Shanghai Jiao Tong World Ranking.

Faculty of Science and Engineering
The Faculty of Science and Engineering is large and comprehensive, with two component schools: Engineering and Natural Sciences, comprising nine departments – School of Engineering: Computer Science; Mechanical, Aerospace and Civil Engineering; Electrical and Electronic Engineering; Chemical Engineering and Analytical Sciences; School of Natural Sciences: Chemistry; Earth and Environmental Sciences; Mathematics; Materials; and Physics and Astronomy. Together with eight research institutes (Manchester Institute of Biotechnology, the Photon Science Institute, Dalton Nuclear Institute, National Graphene Institute, Manchester Energy, the International Centre for Advanced Materials, the Manchester Institute for Mathematical Sciences and the University of Manchester Aerospace Research Institute) the Faculty has a diverse portfolio at the highest quality. Many major advances of the 20th century began here, including the work by Rutherford on the splitting of the atom and the development of the world's first digital stored-program computer. Today, research activities remain at the cutting-edge and the Faculty now generates in excess of £125M in research funding each year.

Department of Computer Science
Manchester has a long and distinguished track record in the research and teaching of core Computer Science, and across interfaces to adjacent disciplines. Founded upon the pioneering

work of Williams, Kilburn and Turing, the Department was the first academic Department of Computer Science in the UK and one of the first to run an undergraduate programme. The research strength of the Department is reflected in consistently strong returns in UK research assessment exercises (5* in RAE 2000, 2nd in Research Power in RAE 2008, 4th in overall GPA in REF 2014 and ranked equal 1st for research environment). The Department is among the largest in the country, and thus has been able to develop research and teaching profiles that are both broad and deep, reflecting critical mass both in core areas of the discipline (e.g. computer architecture, computer engineering, information management, logic and automated reasoning, machine learning and robotics, and text mining) and in several interdisciplinary fields (e.g. nanotechnology, bioinformatics, and health informatics, neuro-morphic computing and HPC systems).

Machine Learning
The Machine Learning activity at Manchester spans many research groups and departments. Topics of interest to current staff in the Department of Computer Science include for example: **causal modelling, dimensionality reduction, deep learning, information theoretic methods, reinforcement learning, game theory, text mining, computer vision and language in developmental robotics**. In addition, we engage strongly with interdisciplinary work such as **systems biology** (Rattray), **biomarker identification**, **energy demand management**, and **systems biology**.

Job Description Lecturer

You will join an internationally leading Department of Computer Science. You will therefore be required to carry out high quality research, to disseminate it in suitable high-impact outlets, to secure significant research funding and to contribute to the Department's teaching activities. The specific responsibilities of the person appointed will be agreed with the Head of the Department of Computer Science and will evolve with time. **The primary expectations are that you will establish and continue to grow the following aspects of the role:**

Research
- an emergent record of output of high-quality, peer-reviewed research publications or other equivalent recognised forms of research output appropriate to the discipline.
- obtaining research funding and active participation in externally funded research.
- successful supervision of PGR students.
- strong positive recognition in the relevant international research communities.
- developing national and international research collaborations.
- attracting and supervising postgraduate research students.
- managing graduate students and research staff in such a manner as to ensure the success of their projects and to maximise their career development.

Teaching
- Contributing to and enhancing the teaching programmes of the Department of Computer Science at both undergraduate and postgraduate levels.
- Contribute to teaching related administration, examination, and to curriculum design.
- Supervise undergraduate and taught postgraduate student projects and tutorials.

Other
- Contributing to the management of the Department's activities and broader objectives of the Department.

Person Specification Lecturer

The appointee will be expected to develop a research program, to supervise research students and staff and to develop teaching materials. The appointee is expected to have the following:

Essential
- A relevant PhD (or equivalent qualification) plus experience in a relevant discipline.
- A sustained record of high-quality publications in the best ML outlets, such as ICML, NeurIPS, AISTATS, JMLR, PAMI, ECML, ICLR, IJCAI, AAAI, MLJ.
- Experience of supervising/co-supervising (potentially in an informal capacity) PhD students in ML.
- The ability to enthusiastically teach aspects of UG/PG programmes in CS.
- Evidence of service to the research community, e.g., programme committees and reviewing
- An organised and systematic approach to your work.

Desirable
- Demonstrable involvement in research funding applications.
- Several years of postdoctoral experience and collaboration with major labs internationally.
- Experience of working in, or with, industry.
- Excellent interpersonal and communication skills.
- Experience of planning and developing teaching materials.
- Successful experience of supervising postgraduate students.

Job Description Senior Lecturer

The specific responsibilities of the person appointed will be agreed with the Head of the Department of Computer Science and will evolve with time. **The primary expectations are to have and continue to grow the following:**

Research:
- an established record and continuing trajectory of output of high-quality, peer reviewed research publications or other equivalent recognised forms of research output.
- a record of success in obtaining external research funding.
- a record of successful supervision of PGR students, developing their careers.
- evidence of a developing reputation in the relevant international research communities.
- evidence of making a positive contribution to the research development of others.
- a record of service to the research community.
- evidence of effective research collaboration, including beyond discipline where appropriate.

Teaching
- a sustained record of successful teaching.

- a sustained record of effective setting/marking of assessment, including provision of feedback to students.
- a record of development in the content, delivery or assessment of the curriculum at course-unit level.
- a record of effective contribution to programme management, including systems of student support.

Other
- contributing to the management of the Department's activities and the broader objectives of the Department.
- active participation in advisory committees or professional or practice-based forums relevant to discipline.

Person Specification Senior Lecturer

The appointee will be expected to have their own research program, to supervise research students and staff, to develop new initiatives and lead activities in the Department. The appointee is expected to have the following:

Essential
All essential criteria as written in the lecturer post, plus in addition:

- Demonstrable success in research funding applications.
- A growing and self-evident reputation in the international community.
- Demonstrable ability to stimulate research activity beyond your own agenda.

Desirable
As written in the lecturer post, plus in addition:

- Evidence of your research having impact beyond academia (e.g., industry, society, education, policy etc).