

## Post-Doctoral Research Associate

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*Full Time*

*Fixed Term Contract for 2 years*

*Grade: AC2*

*Walton Hall, Milton Keynes*

### **The role**

The Postdoctoral Researcher will work on the newly awarded CIMPLE project, funded by CHIST-ERA for the total value of €1.6M. CIMPLE stands for Countering Creative Information Manipulation with Explainable AI. The project aims to research and develop innovative knowledge-driven solutions for the detection and tracking of online information manipulation, while taking into account various AI-explainability needs and requirements. The project is a collaboration between the Open University and universities in Portugal and the Czech Republic, and industries in Austria and France.

The Postdoctoral Researcher will collaborate with other partners in the project to research, develop, and evaluate explainable computational methods for identifying and tracking information manipulation. In particular the postholder will focus on the use of knowledge-graphs, text processing, and machine learning to capture various type of manipulations in online content over time. The candidate should have good communication and collaborative skills to interact with the research groups involved in the project.

The position is available for 2 years, with the possibility of extension subject to funding.

### **Key responsibilities**

The person appointed to this post will undertake duties to include:

1. Working with an interdisciplinary team of local and external researchers
2. Collection, processing, and analysis of data and content related to the project
3. Development and testing of methods for detecting and tracking of information manipulation in online news and social media
4. Designing and evaluating various explainability approaches
5. Participation in project meetings and research planning activities
6. Leading as well as supporting others in disseminating results in journal publications and project reports and at conferences and meetings
7. Leading or supporting the development of further research bids.

All Staff are expected to:

1. Co-operate with the Open University in ensuring as far as is necessary, that Statutory Requirements, Codes of Practice, University Policies and Departmental Health and Safety arrangements are complied with.
2. Have a strong commitment to the principles and practice of equality and diversity.
3. Attend appropriate staff development events

## Person Specification

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### Essential

- Applicants should have a PhD Degree, or be about to submit, in a relevant subject.
- Excellent publications track record at high impact relevant journals and/or conferences.
- Experience of large-scale content processing and analysis is essential.
- Good knowledge of semantic technologies and knowledge-graphs.
- Very good machine learning and computer programming skills.
- The ability to network and communicate effectively with managers, scientists, and developers in academia and industry.
- Good presentation skills at meetings, seminars and conferences.
- Ability to write concisely in English, including preparation of research plans, project reports and scientific papers.
- Ability to deliver outcomes by taking initiatives, managing competing priorities and working with others effectively.

### Desirable

- Good knowledge of explainable AI is a strong advantage
- Experience with collecting, processing, and analysing social media data.
- Experience with researching misinformation content and sources.
- Knowledge of emotion, bias, and argumentation analysis.
- Experience in leading research project work packages.

If you would like further details about the role before making an application then please email your query through to Phebe Lau at [Resourcing-Hub@open.ac.uk](mailto:Resourcing-Hub@open.ac.uk)

## About the Unit

### STEM

#### **Faculty of Science, Technology, Engineering & Mathematics**

The Faculty of Science, Technology, Engineering and Mathematics (STEM) is comprised of:

- School of Computing & Communications
- School of Environment, Earth & Ecosystem Sciences
- School of Engineering & Innovation
- School of Life, Health & Chemical Sciences
- School of Mathematics & Statistics
- School of Physical Sciences
- Knowledge Media Institute
- Deanery including teams supporting Curriculum; Research, Enterprise and Scholarship; Laboratory Infrastructure; and Faculty Administration

**“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”**

The Faculty of STEM consists of 2500 staff including 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting nearly 19,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £17M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.

We are proud of our distinctive values and capabilities underpinning our aspiration:

*We are inclusive:*

- We transform people’s lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience.
- We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM.

*We are highly innovative:*

- We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation.
- Our high quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy.

*We deliver significant social and economic impact:*

- We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential.

- We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working.
- The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers.
- Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill-shortages across the UK.

### **The Knowledge Media institute**

The Knowledge Media Institute (KMi - <http://kmi.open.ac.uk/>) is a distinct research unit within the Faculty of Science, Technology, Engineering and Mathematics (STEM) at the Open University. KMi is a multidisciplinary R&D lab that has been at the forefront of innovation for the past 25 years. We lead in a number of areas, including Semantic Technologies, Educational Media, Social Media Analysis, Big Data, Blockchain, Smart Cities, IoT and others.

The Knowledge Media Institute is a dynamic and fun department with a friendly workforce and good social interaction opportunities. We strongly believe in inclusivity and openness and we are proud of our track record in attracting, throughout our history, lab members from a wide variety of backgrounds - at any one time, KMi typically consists of around 20 distinct nationalities in our circa 80 personnel. KMi is active in challenging injustice and promoting equitable treatment for those from marginalised or under-represented groups, and holds an Athena Swan Bronze award for its work in promoting gender equality.

Benefits include a supportive and friendly working environment, 33 days holiday per annum pro rata plus Bank Holidays and Christmas closure days, and an attractive pension proposition. An opportunity to work on cutting edge research with world-leading international research teams and organisations.