Researcher – IT FLOWS Project  
(12 Month Fixed-Term Full Time Contract)

The Computer Science Department and the ADAPT Centre team of Munster Technological University (MTU) in Cork, Ireland, invites applications for a Researcher position in Natural Language Processing. Cork, the second largest city in Ireland, is an attractive city for students and researchers.

ADAPT is the world-leading SFI research centre for AI Driven Digital Content Technology, coordinated by Trinity College Dublin and based within Dublin City University, University College Dublin, Technological University Dublin, Maynooth University, Munster Technological University, Athlone Institute of Technology, and the National University of Ireland Galway. ADAPT’s research vision is to pioneer new forms of proactive, scalable, and integrated AI-driven Digital Content Technology that empower individuals and society to engage in digital experiences with control, inclusion, and accountability with the long term goal of a balanced digital society by 2030. ADAPT is pioneering new Human Centric AI techniques and technologies including personalisation, natural language processing, data analytics, intelligent machine translation human-computer interaction, as well as setting the standards for data governance, privacy and ethics for digital content.

The successful candidate will join the H2020 Project ITFLOWS (https://www.itflows.eu/).

In collaboration with the research team, they will develop new algorithms for Social Media analysis and information extraction, using (semi)-supervised and unsupervised techniques, transfer learning and Natural Language processing applied in the areas of Offensive Language, Hate Speech and intention detection.

This collaborative research project presents the successful candidate with the opportunity to work in a supportive, exciting, fast moving and excellent technical environment, playing a guiding role in a research project. The motivation of the team is to grow this research-led initiative into effective commercialisation of the research work products.

The role will also include an opportunity to carry out research in Deep Learning interpretability, specifically focusing on social media analysis and Natural Language processing. In collaboration with the Principle Investigator, the Researcher can co-supervise and support postgraduate students working on the same topic.
Location

Reporting to the Principal Investigator, Dr Haithem Afli, this position is based in the MTU Bishopstown campus in Cork, Ireland in the first instance.

Duties and responsibilities for the role

The Researcher will:

▪ be responsible for designing and implementing new methods and guidelines for creating a social media corpus dedicated to the project.

▪ be responsible for new models for Offensive Language, Hate Speech and intention detection using Social Media analysis and information extraction, using (semi)-supervised and unsupervised techniques, transfer learning and Natural Language processing.

▪ Work on the analysis and the visualisation of the results.

▪ Engage in the dissemination of the results of the research in which they are engaged with the support of and under the supervision of the Principal Investigator.

▪ Together with the Principal Investigator, attend the project calls and meetings in Ireland and outside if needed with the support of and under the supervision of the Principal Investigator.

▪ Contribute in the preparation of the project deliverables with the support of and under the supervision of the Principal Investigator.

▪ Assist the Principal Investigator in postgraduate students’ supervision.

▪ Engage in appropriate training and development opportunities as required by the Principal Investigator, the Department or Research Centre, or the University.

▪ Complete administrative work associated with the programme of research as necessary.
Qualification Requirements for the role

Ideally the postholder will be required to hold a PhD, or are close to completion of their PhD, in a relevant field of Machine Learning and Natural Language Processing. Alternatively, significant relevant industrial experience in Artificial Intelligence (a minimum of 2 years relevant experience) or close to completion of a Master’s degree in Artificial Intelligence will be considered in lieu of postgraduate qualifications.

In addition, it is desirable that a candidate has skills in:

- Sentiment analysis, Social Media Analysis and visualisation.
- Knows and/or work on Arabic language processing.
- Established record providing student supervision and support.
- Designing and running experiments on high-performance computing clusters.
- A strong publication record of international peer-reviewed publication and presentation in top-tier conferences and journals.
- Excellent research skills with experience neural approaches to Natural Language Processing including sentiment analysis, social media analysis.
- Excellent written and verbal communication and interpersonal skills.

Terms of the Appointment

The position will be initially for a period of 12 months with a possibility for extension depending on the candidate’s suitability. The successful candidate would be expected to start as soon as possible after receiving an offer.

Salary Range

Remuneration will be on the Researcher Salary scale (€37,028 - €40,297) per annum in line with relevant experience

The Interview Process

- If invited to interview, candidates will be assessed at the interview under the following criteria:
  
  - Relevant research
  - Programming
  - Oral Presentation

October 2021
Applications by MTU eRecruitment system only. Applications will not be accepted in any other format. Please log on to [www.mtu.ie/vacancies](http://www.mtu.ie/vacancies)

**Closing date for receipt of completed applications is 1.00 pm on Tuesday, 19th October 2021.**

**NOTE:**
In addition to the minimum qualifications, it may be necessary to introduce further shortlisting criteria.

Therefore, candidates may be shortlisted on the basis of qualifications and suitable experience, based on details given in the application form. Candidates should note that they may be called for more than one interview.

Munster Technological University is an equal opportunities employer.

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