Job Description

Job Title:	**Research Fellow in Machine Learning**
Job Ref:	**SCT353**
Campus:	**Hendon**
Grade:	**Grade 7**
Salary:	**£41,990 per annum pro rata** (for part-time staff)
Hours:	**20.25 hours per week, actual daily hours by arrangement**
Period:	**20 months**
Reporting To:	**Prof. David Windridge**

Role Summary

The Project

We are seeking a Research Fellow in Large Language Model Machine Learning to develop and apply appropriate deep learning algorithms in relation to the CHIST-ERA JUDDGES project.

JUDDGES is a 3-partner, 20-month, European CHIST-ERA-funded project with the goal of leveraging Large Language Model (LLM) Machine Learning for the development of legal tools.

The post holder will help develop the Machine Learning methodology and Legal Annotation aspects of the project, involving deep LLM learning and other related approaches (potentially including neurosymbolic reasoning & general ML development).

Job Purpose

• To research and develop advanced machine learning techniques relevant to the project goals and to evaluate these on both project & reference data sets.
• To lead and manage relevant work packages in support of Project JUDDGES, ensuring appropriate interfacing with partners & delivery of final demonstrator.

Main responsibilities

- To lead a Work Package and to work with those of research partners; to carry out individual and collaborative research relevant to the project.
- To contribute to the development of software according to project specifications.
- To produce research reports and deliverables related to the project.
- To take lead in preparing conference and journal articles for high quality peer-reviewed publication.
- To undertake work package leadership and general administrative tasks to ensure the smooth running of the project.
- To coordinate with research partners and stakeholders related to the project with immediate responsibility for the work package.

- To assist in limited teaching and student project supervision as agreed by line manager.
- To assist in any other task defined by the line manager as appropriate to the post and grade.

Leave: 35 days per annum plus eight Bank Holidays and seven University days taken at Christmas (pro rata for part-time staff) which may need to be taken as time off in lieu.

Fixed Term Contract

This temporary appointment is for the following allowable reason:

- To carry out a project which is being funded externally.

Therefore, this appointment has a defined end date of 20 months from the start date.

If you are applying as an internal candidate to do the temporary post as a secondment please discuss this with your line manager first and read our Secondment Guidelines.

Flexibility: Please note that given the need for flexibility in order to meet the changing requirements of the University, the duties and location of this post and the role of the post-holder may be changed after consultation. The balance of duties may vary over time and will be reviewed as part of the appraisal process.

PERSON SPECIFICATION

Post Title: **Research Fellow in Machine Learning (JUDGES)**

Essential requirements

Knowledge, Skills and Experience

As Researcher:

- A PhD in a relevant discipline (e.g., computer science, mathematics, physics).
- Very strong track record of original research, development and application of deep machine learning algorithms.
- A research track record in developing Large Language Models (LLMs) applied to the judicial domain.
- Prior post-doctoral experience.
- Ability to code developed algorithms in Pytorch or similar.
- Experience in using initiative and creativity for research, problem solving, data analysis, and conclusion formulation.
- Able to carry-out project tasks, write project reports under time pressure & perform collaborative activities among project partners, communicating with co-workers, consortium partners and end-users.

No Parking at Hendon campus: There are no parking facilities for new staff joining our Hendon campus, except for Blue Badge holders. If you are applying for a post at our Hendon campus please ensure you can commute without a car.

Information on public transport to Hendon can be found here:
http://www.mdx.ac.uk/aboutus/Location/hendon/directions/index.aspx
We offer an interest-free season ticket loan, interest-free motorbike loan, a cycle to work scheme and bicycle and motorbike parking and changing facilities.

We value diversity and strive to create a fairer, more equitable work environment for our staff and students.

We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff diversity networks, campus facilities and services to support staff from different backgrounds.

The postholder should actively follow Middlesex University policies and procedures and maintain an awareness and observation of Fire and Health & Safety Regulations.

What Happens Next?

If you wish to discuss the job in further detail please contact David Windridge, Professor of Data Science and Machine Learning via d.windridge@mdx.ac.uk