Research Assistant B - Predictive Modelling for Stroke Outcome (Fixed term contract for 6 months)  
(Reference: 235/2024)

Research Hubs,  
Technological University Dublin (City Campus)

Research Hubs, TU Dublin currently has a position available for a Research Assistant B - Predictive Modelling for Stroke Outcome.

**Job Description**

The department is seeking to appoint a Research Assistant B Predictive Modelling for Stroke Outcome, on a fixed term (6 months) specified purpose basis. The role will include applying machine learning, statistical analyses and other analytics to clinical data of stroke patients in order to build explainable models predicting stroke outcome, utilizing python and other software packages. The post holder will be required to carry out the research including analyzing/preprocessing large clinical datasets, training, running and validating predictive models, recording, and writing up the results.

**Principal Accountabilities**

- Report to Principal Investigator, PhD researcher and research team supervisors.
- Contribute to the research design in relation to the project.
- Manage time effectively to meet the deliverables of the project.
- Ensure quality of results through the use of validation and explainability techniques.
- Record, interpret and write up the results of the research studies.
- Prepare and present findings of research activity to colleagues for review purposes.
- Contribute to the overall activities of the research team and department as required.
- Be responsible for following GDPR policies with respect to patient clinical data.
- Engage in appropriate training and professional development opportunities as required by the School or University, and where applicable the PI.
- Carry out any other duties within the scope, spirit and purpose of the job as requested by the PI.
- Actively comply with all TU Dublin policies and regulations, including those in relation to Research Ethics and Health and Safety.

**Person Specification**

*The ideal candidate will demonstrate the appropriate mix of knowledge, experience, skills, talent and abilities as outlined below:*

**Knowledge**

- An undergraduate B.Sc. (Hons) (NFQ level 8) in Computer Science or a related discipline or equivalent award by an approved degree-awarding authority. *(essential)*
- Research experience or equivalent research experience (at least three years) in the public or private sector *(essential)*
• Extensive knowledge of research techniques and methodologies of explainable machine learning model development (e.g., neural networks, logistic regression, etc.) (essential)
• Ability to work with a range of ML libraries and resources, scikit, Tensorflown/Pytorch) (essential)
• Evidence of research publication record and national/international recognition of achievement within the area of AI for Health (essential)
• A Master’s degree (desirable)
• Experience in preparing deliverables for European (H2020, Horizon Europe projects) (desirable)
• Fluency in foreign languages (desirable)

Experience

• Previous experience of working with large clinical datasets following GDPR policies. (essential)
• Experience in developing machine learning models (e.g., neural networks, logistic regression, etc.) and experience in applying explainability methods to interpret models (e.g. SHAP). (essential)
• Experience in writing up research results and preparing manuscripts for publication. (essential)

Skills, talents & abilities

• Skilled programmer in one or more of: Python, Julia, R (essential)
• Effective written and verbal communication skills with ability to present complex information effectively to a range of audiences (essential)
• The successful candidate will be highly skilled and motivated with the ability to work independently and as part of a team. (essential)

Salary

• The successful candidate will be appointed at Point (01) of the Research Assistant B salary scale i.e. €33,881 gross per annum. (Position is for 6 months)

Interested parties should send a current CV to katryna.cisek@tudublin.ie by 5pm July 5th 2024 with interviews taking place the third week of July.