Job Description

Position / Job Title:	**Research Assistant (RED ID 12953)**
Ref:	**347**
Location/Building:	**Talbot House - Talbot Campus**
Faculty/Professional Service:	**Faculty of Science and Technology**
Group/Section:	**Computing & Informatics**
Duration if Temporary:	**4 months fixed term contract**Click or tap to enter a date.
Normal Hours per Week:	**37 hours**
(Some flexibility will be required in order to ensure that key time scales and deadlines are met).	
Grade:	**4**
Accountable to:	**Prof Hamid Bouchachia**

Job Purpose

A Master Degree holder to undertake directed research activity as part of EXTREMEXP (Experiment-driven and user experience-oriented analytics for extremely precise outcomes and decisions) under the direction of the Principal Investigator, Prof Hamid Bouchachia. The project will develop Scenario-driven and opportunistic machine learning with the aim to (1) design and develop AutoML mechanisms for performing scenario-based algorithm and model selection considering on-demand user-provided constraints (performance, resources, time, model options), (2) devise mechanisms for continual learning in algorithm and model selection: as new data sets become available, the so-far learned selection strategies are continuously adapted avoiding any re-training.

The role of the Research Assistant, with at least a master's degree, is to contribute to the delivery of the project (in terms of planning, designing and conducting research to produce published outputs around new and original ML algorithms and strategies leading to exploitable constraint-aware ML involving various concepts such as Meta-learning, Continual Learning, AutoML, Scalable ML and Trustworthy AI). The RA will also provide project management co-ordination and administrative support.

Main Responsibilities

1. Deliver research objectives of proposed work within the timeframes of the project and ensuring the achievement of project outcomes.

2. Plan, design, conduct research, and report the work in the form of official reports.

3. Maintain accurate, complete and timely data and records in accordance with the project's data management protocols.

4. Present findings at to the consortium.

5. Co-ordinate the day-to day administrative management of the project, including producing progress reports as required.

6. Act as first point of contact for the project(s) and liaise with colleagues from project partners as required.

7. Undertake personal and professional development activities in line with agreed appraisal and development programme to enhance personal knowledge and contribution to relevant activities.

Organisation Chart

RA → Prof Hamid Bouchachia

Dimensions

The work to be undertaken is part of the EU project **ExtremeXP: EXPeriment driven and user eXPerience-oriented analytics for eXtremely Precise outcomes and decisions** with the vision to provide accurate, precise, fit-for-purpose, and trustworthy data-driven insights via evaluating different complex analytics variants, considering end users' preferences and feedback in an automated way. The project will cover the following areas: **Meta-learning, Continual Learning, AutoML, Scalable ML** and **Trustworthy AI**. The project will target new and original ML algorithms and strategies leading to exploitable **constraint-aware ML and analytics services.**

Contacts:

Internal: Prof Hamid Bouchachia

External: ExtremeXP's Consortium partners

Challenges What are the most difficult, complex or challenging parts of the job

The candidate should have strong background in machine learning, preferably be familiar with Meta-learning, Continual Learning, AutoML, Scalable ML and Trustworthy AI.

Information Governance Responsibilities

Data User
  i. Comply with the associated data protection, information security, information management and information technology regulations, policies, processes and procedures.

Safeguarding and Regulated Activity
If the role involves engaging in regulated activity relevant to vulnerable groups including children and disabled
adults, it is an offence to apply for and perform the role, if a person is bared from engaging in regulated activity.
Further information is available in BU's Safeguarding Policy and Suitability Statement on the Recruitment and
Employment of Ex-offenders.

Additional Information

The purpose of the job description is to indicate the general level of responsibility and location of the position. The duties may vary from time to time without changing their general character or level of responsibility.

BU is an equal opportunities employer which values a diverse workforce. The post holder must at all times carry out their responsibilities with due regard to the University's Dignity, Diversity and Equality Policy Statement.

Our highly skilled and creative workforce is comprised of individuals drawn from a broad cross section of the globe, and who reflect a variety of backgrounds, talents, perspectives and experiences to build our global learning community. Through fused activity, the post holder must have an understanding of and commitment to promoting a global outlook.

All employees have an obligation to be aware of the University's Sustainability Policy, Climate and Ecological Crisis Action Plan, Travel Plan and associated documents, and to ensure that they carry out their day-to-day activities in an environmentally responsible manner and inspire students to do the same.

Person Specification

Position / Job Title: Research Assistant	Faculty / Service: Computing & Informatics
Position No: POSN108947	Date:

SELECTION CRITERIA	**E**ssential / **D**esirable
Knowledge (including experience & qualifications)	
Expertise in Machine Learning (with knowledge in Meta-learning, Continual Learning, AutoML, Scalable ML and Trustworthy AI.)	E
At least a master's degree holder in computer science, applied mathematics, probabilities, statistics, or engineering	E
Experience of using ML libraries and programming languages (such as Python)	E
Understanding of ML workflow, development tools, and big data ecosystems	E
Understanding of distributed ML	D
Skills	
Ability to work independently	E
Ability to work to deadlines	E
Excellent communication skills	E
Strong administrative skills	D
Strong writing abilities	E
Effective team working skills	E
Ability to reason accurately and quickly and handle complex situations.	D
Attributes	
Analytical	E
Collegiate	E
Commitment to high quality research	E
Initiative	E
High level of attention to detail	E
Motivated to succeed	E