**Fully funded 1 year Industrial MPhil opportunity from University of Leicester**

Please note these positions are only available to UK and EU students

**One year fully funded industrial MPhil** available from the University of Leicester – Department of Mathematics - to undertake applied research and development on behalf of a Small and Medium Enterprise (SME) in Leicester & Leicestershire. The company is provider of cloud-based software platforms that support apprentices and other learners to achieve better outcomes and experience an improved learner journey. The MPhil research will develop a series of algorithms that will analyse input data from the apprentice/learner and their engagement with the software. The industrial MPhil is funded by the Leicester Innovation Hub (through European Regional Development Fund monies), and the sponsoring SME.

**MPhil Opportunity**

“To develop algorithms with the objective to provide employers and training providers (Rubitek’s customers) with evidence of learner disengagement at a much earlier stage than a human may detect”

Project Ref: LIH221

**Background**

Rubitek’s flagship software solution, Rubitek Core, is a system designed to reduce the administrative burden and cost of delivery for employers and education providers whilst better engaging learners and bringing together the support and commitment from everyone involved in each learner’s journey. The learner app in particular encourages improved learner engagement at every step of the journey.

**The Project**

The aim of this project is to develop a series of algorithms that will analyse input data from the apprentice/learner and their engagement with the software. These algorithms will be designed to detect changes in behaviour and/or attainment, and flag these as potential indicators of disengagement. This project will transform the learning journey, facilitating much earlier intervention and delivering improved retention and completion outcomes which in time will help to inform national policy around best practice intervention methods.

You will work closely with the sponsoring Leicestershire based SME and University of Leicester. Supervision will be provided by Prof Jeremy Levesley and Dr Ayo Akinduko

**Qualifications:**
- Bachelor Degree with at least a UK 2.1 in mathematics, computer science, or related disciplines
- Experience in algorithm development, software programming
- University [English language](#) requirements apply.

**Skills**
- Data analysis skills and statistical skills are essential for this project
- Software testing
- Research and network development
- Skills in programming languages (java, python, c++)
- Ability to build strong working relationships with core stakeholders (academics, sponsoring SME).
Leicester Innovation Hub is part-funded by European Regional Development Fund and the University of Leicester

- Business engagement/development skills and aptitude.
- Effective English oral and written skills in order to communicate effectively.
- A self-starter who is able to work as part of a team.

**How to apply**

Please apply using the [online application system](#).

Apply for: Campus Based Full Time / Mathematics Research

- In the **funding section** of the application, please select **Studentship** and in the dropdown menu, select **ERDF MPhil project**.
- In the **Personal Statement** section - please indicate clearly why you are interested in undertaking this research project and why you are the best candidate to help deliver the project objectives.
- In the **Research Proposal Section** please state: Applying for MPhil Project Ref: LIH 221. You do not need to include a research proposal.

Shortlisted applicants will be invited to an interview with the academics and the sponsoring SME. Interviews are expected to be held within 14 days of the application deadline.

**Application Deadline**

Open until filled

**Conditions/Qualifying Criteria**

The Leicester Innovation Hub is part-funded by European Regional Development Fund (ERDF).

To qualify for fully funded support the SME, MPhil student and University of Leicester academics must fulfil all ERDF and University MPhil degree eligibility criteria which include:

- The MPhil student: **must be a UK or EU (European Union) national**; have graduated within the last 3 years in a related discipline; adhere to project confidentiality; at the start of the project assign any arising IP from the project; base their MPhil degree thesis on the research outcomes of the project; work closely with the SME company to undertake the research project; deliver monthly progress reports and a comprehensive project report to the University and sponsoring SME in addition to the MPhil thesis. Please note that University of Leicester requires at Bachelor Degree with at least a UK 2:1 or equivalent.

- Each SME project will be delivered by one full-time MPhil student over one year; the MPhil project will have a research focus and will be supervised by two University of Leicester academics (1 day a week each; academics are required to complete timesheets).

**Who pays?**

- The University of Leicester pays a monthly stipend of £1,166.67 (total Stipend £14,000) in arrears to the student. The funding will be strictly limited to 12 months.
- The SME pays the University’s 1 year full-time MPhil fees (upfront before project start).

**Times Scales**

- **This one year MPhil project will start as soon as possible aligned with University start dates.**
- The MPhil projects will last a minimum of one year full-time.

**Further Information**

For informal enquiries about technical aspects of this Industrial MPhil please contact Prof Jeremy Levesley: [jl1@leicester.ac.uk](mailto:jl1@leicester.ac.uk)

Contact Jenny Hollis ([jih74@leicester.ac.uk](mailto:jih74@leicester.ac.uk)) for more information about the Leicester Innovation Hub.