



OPPORTUNITY

Where change gets real.



Reference: 0578-24

Salary: An Overall Package of up to £70,000 per annum, depending on skills and experience with up to £6,000 dedicated professional development budget.

Contract Type: Fixed term (36 Months)

Basis: Full Time

Job description

This 36-month project takes the form of a [Knowledge Transfer Partnership](#) (KTP), which provides you with practical and formal training and the availability of support from experienced mentors from [Domestic and General Insurance Plc](#), [Aston University](#) and [Innovate UK Business Connect](#).

Job Purpose:

D&G faces a growing problem with fraudulent claims across their product range including false and exaggerated claims, misuse and intentional goods' damage for staged losses, policy fraud such as untrue value of goods or their actual condition. These are projected to drive £13.4m in claims in the next 12 months.

To protect the business against financial losses caused by fraudulent behaviours, D&G needs to establish an ecosystem that robustly identifies and applies suitable scrutiny to claims from high-risk customers or products, closes accounts of repeat offenders, and prevents high-risk customers from buying new insurance products.

The KTP project will give D&G embedded capabilities in the latest AI advances including:

- Multimodal data analytics
- Key feature extraction/Automatic annotation/Semantic linking of data assets
- Federated learning
- Data mining
- Deep Learning/Natural Language Processing
- Predictive Analytics
- Dynamic risk thresholding
- Network analytics/neural networks
- Generative AI agents

This role offers an exciting opportunity for a candidate who brings the analytical rigour and expertise to direct, lead and cocreate a sophisticated Intelligent Fraud Detection System, and the commercial and operational background to embed it cross-functionally into the organisation.

Candidate Profile: PhD in a relevant AI discipline, or minimally an MSc in AI related discipline with significant, demonstrable commercial or research experience in a related field.

Skills/ experience required include:

- Robust knowledge in data science, machine learning (ML), and predictive analytics particularly in NLP
- Experience using rule-based Generative AI (Gen-AI) models.
- A proven background of working with large datasets, and exposure to commercial environments.
- Knowledge of Retrieval-augmented generation (RAG) framework
- Significant experience in solving language-based problems.
- Industry experience alongside relevant academic background
- Effective interpersonal skills across a range of stakeholders from engineering / technical staff to clients and non-experts

Desirable

- Network analytics and voice analytics.
- User centric Graphical User interface (GUI) and User Experience
- Producing academic publications of the highest standards
- Technical writing and reporting, etc
- Skills in project management

Main responsibilities:

- Lead, direct, and manage a strategic industrial research project including monitoring progress towards milestones and budgets.
- Design, implement and deliver a complex project with multiple technical challenges across multimodal data analytics, machine learning and Generative-AI in the rapidly evolving financial technology sector.
- Develop, evaluate, and integrate a novel Intelligent Fraud Detection System into Domestic & General operating systems including:
 - o Investigating user requirements and Quality of Experience for the system functionality and user interface
 - o Handle vast amounts of code and understand their functionalities and semantics prior to intended use and customisation.
 - o Multimodal data analytics and automatic annotation
 - o Gen-AI based transcripts analysis.
- Work collaboratively with Domestic & General staff to embed new skills and knowledge across cross-functional teams.
- Design and deliver training workshops and presentations to D&G senior staff and KTP stakeholders on project progress.
- Work with academic supervisors to deliver high-quality publications, conference presentations and development of teaching case study materials to disseminate research findings.

Additional responsibilities

- ▶ Engage in continuous personal and professional development in line with the demands of the role, including undertaking relevant training and development activities to develop themselves and support the development of others.
- ▶ Ensure and promote the personal health, safety, and wellbeing of staff.
- ▶ Carry out duties in a way which promotes fairness in all matters, and which engenders trust.
- ▶ Promote equality of opportunity and support diversity and inclusion as well as working to support the University's environmental sustainability agenda and practices.

Person specification

	Essential	Method of assessment
Education and qualifications	<ul style="list-style-type: none"> ▶ PhD or MSc degree in Data Science 	Application form
Experience	<ul style="list-style-type: none"> ▶ Extensive experience using Generative AI (Gen-AI) models. ▶ Significant experience in solving language-based problems. ▶ Industry experience alongside relevant academic background 	Application form and interview
Aptitude and skills	<ul style="list-style-type: none"> ▶ Robust knowledge in data science and machine learning (ML) ▶ A proven background of working with large datasets, and exposure to commercial environments. ▶ Knowledge of Retrieval-augmented generation (RAG) framework 	Application form and interview

	Desirable	Method of assessment
Experience	<ul style="list-style-type: none"> ▶ User centric Graphical User interface (GUI) and User Experience ▶ Producing academic publications of the highest standards 	Application form and interview

	Desirable	Method of assessment
Aptitude and Skills	<ul style="list-style-type: none">▶ Network analytics and voice analytics.▶ Technical writing and reporting▶ Project management	Application form and interview

University values

All staff are expected to demonstrate/promote the University's values and expectations, which are an integral part of our strategy and underpin the culture of the University. In addition, our leaders are expected to be accountable, help to execute strategic visions of the University and share and set clear expectations that inspire those around them.

Values + Behaviours

				
Innovation	Collaboration	Ambition	Inclusion	Integrity
We strive for excellence within ourselves and others, providing solutions to new and existing challenges.	We work best when we are collaborative, working together to contribute to the Aston community.	We strive together for improvement and innovation looking ahead to see the bigger picture.	We treat everyone in our community equally and how they would like to be treated.	We are open, honest and fair. We take ownership of the way we work and how we treat each other.

How to apply

You can apply for this role online via our website <https://www2.aston.ac.uk/staff-public/hr/jobs>.

Applications should be submitted by 23.59pm on the advertised closing date.

All applicants must complete an application form, along with your CV.

Any CV sent direct to the Recruitment Team and Recruiting Manager will not be accepted.

If you require a manual application form, then please contact the Recruitment Team via recruitment@aston.ac.uk.

Contact information

Enquiries about the vacancy:

Name: Dr Amal Htait, College of Engineering & Physical Sciences (EPS)

Email: a.htait@aston.ac.uk

Enquiries about the application process, shortlisting or interviews:

Recruitment Team via recruitment@aston.ac.uk or 0121 204 4500.

Additional information

Visit our website <https://www2.aston.ac.uk/staff-public/hr> for full details of our salary scales and benefits Aston University staff enjoy.

Salary scales: <https://www2.aston.ac.uk/staff-public/hr/payroll-and-pensions/salary-scales/index>

Benefits: [Benefits and Rewards | Aston University](#)

Working in Birmingham: <https://www2.aston.ac.uk/birmingham>

Employment of Ex-Offenders: Under the Rehabilitation of Offenders Act 1974, a person with a criminal record is not required to disclose any spent convictions unless the positions they applying for is listed an exception under the act.

Eligibility to work in the UK: You should ensure that you meet the eligibility requirements, including meeting the [English language standards](#). If you do not meet the eligibility criteria, any application for a work visa would be unsuccessful. Please see UKVI guidance for further information on eligibility, knowledge of English requirements and approved test centres <https://www.gov.uk/tier-2-general>

With the end of free movement for EU/EEA/Swiss nationals from 1 January 2021, the UK's new immigration system applies to all non-UK/Irish nationals who require a visa.

Where an individual is subject to UK immigration control, they will require a visa to work in the UK.

The following individuals do not need a visa for the UK, but do still have to prove their right to work before employment can commence:

- **British Citizens or Irish Nationals**
- **EU/EEA/Swiss nationals with Settled or Pre-settled status under the EU Settlement Scheme**
- **Non-EEA nationals with Indefinite Leave to Remain/Settlement in the UK**

The main routes available for those who need a visa to work in the UK are **Skilled Worker**, **Global Talent** and the **Graduate Route**.

You can find further information about each of these visa routes on our candidate immigration page.

If you will conduct research in your role, you may need to apply for and obtain ATAS clearance before Aston can issue a Certificate of Sponsorship for your visa application. Please see below for further details.

Academic Technology Approval Scheme (ATAS):

If you will conduct research in your role and you apply for a Skilled Worker or Temporary

Worker GAE visa, you may need to apply for and obtain ATAS clearance before Aston can issue a Certificate of Sponsorship for your visa application.

This process can take at least 6 weeks to process, and Aston will consider this when confirming your expected start date. Processing times will increase between April and September and can longer to complete.

There is no fast-track option available. ATAS certificates will be processed in order of receipt.

You can find more information about ATAS on our candidate immigration page.

This role is likely to meet the criteria for endorsement under the 'Endorsed Funder' route of the Global Talent visa. The Global Talent visa route is available for talented and promising academics, researchers and specialists who are working in the fields of science, engineering, medicine, the social sciences, or the humanities. Please see the published home Office guidance: <https://www.gov.uk/global-talent>.

Before you start and Right to Work

90-day entry vignette

If you have applied for your visa outside of the UK, you will receive a vignette in your passport which is usually valid for 90 days. Please make sure to travel to the UK within the 'valid from' and 'valid to' dates on this visa. If you entered the UK before or after these dates, you would not 'activate' the visa and you would need to leave and re-enter the country.

You will also receive a decision letter confirming details about your immigration permission and where to collect your Biometric Residence Permit.

Cost of Living - Estate and Letting Agents

There are numerous Estate and Letting Agents in and around Birmingham that can help you find suitable accommodation. The Midland Landlord Accreditation Scheme provides a list of professional agencies and landlords who have applied with them for accreditation. Whilst accreditation is not a guarantee of quality, it provides some reassurance about the standard of the service they provide.

You can also use property search websites such as Rightmove or Zoopla.

Equal Opportunities

Aston University promotes equality and diversity in all aspects of its work. We aim to ensure, through our admissions policies for students, and our staff recruitment and selection processes that we encourage applications from all groups represented in the wider community at a local, national and international level.

The University will endeavour not to discriminate unfairly or illegally, directly or indirectly, against student or potential students, staff or potential staff. This commitment applies to all functions of the University and to any stage of an individual's career.

An Equal Opportunities Monitoring Form is included within the application form. Data you provide on the Equal Opportunities Monitoring Form will be included in a general database, for statistical monitoring purposes, enabling the University to monitor the effectiveness of its Policy, Codes of Practice and Guidelines on Equal Opportunities in Employment. Individuals will not be identified by name.

Data Protection

Your personal data will be processed in compliance with the Data Protection Act 2018 and the General Data Protection Regulation ((EU) 2016/679) (“GDPR”). The University’s Data Protection Policy and Privacy Notices, including the Job Applicant Privacy Notice can be found at <https://www2.aston.ac.uk/data-protection>. Your application will only be used to inform the selection process, unless you are successful, in which case it will form the basis of your personal record with the University which will be stored in manual and/or electronic files. Information in statistical form on present and former employees is given to appropriate outside bodies.

Full details of our terms and conditions of service and associated policies and procedures are available online at <https://www2.aston.ac.uk/staff-public/hr/policies>

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