AI Data science Engineer – KTP associate

Aston University
BIRMINGHAM UK

OPPORTUNITY
Where change gets real.

Aston University

Reference: 0298-25

Salary: £40,000 - £45,000 per annum depending on experience with up to £6,000 dedicated development and training 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 [Electronic Arts (EA) Limited](#), [Aston University](#) and [Innovate UK Business Connect](#).

Job Purpose:

This Knowledge Transfer Partnership (KTP) project will harness Data Mining, Multi-modal Data Analytics, Machine Learning, and bespoke Generative-AI tools with the aim of automating the process of optimising developer productivity in game software development at Electronic Arts Limited.

Electronic Arts (EA) was a pioneer of the early home computer game industry and is now a global leader in digital interactive entertainment. EA develops and delivers games, content and online services for internet-connected consoles/mobile devices/personal computers and its cutting-edge games are enjoyed by nearly 600 million players worldwide.

Generative AI is impacting every aspect of game creation within EA and the gaming industry overall. This KTP will ultimately improve game development cycle-time, enabling more iterations in the game creation lifecycle that will both improve game quality and allow delivery of more features.

This KTP is a great opportunity for someone who wishes to plan and deliver business change. You will work with senior University academics on a commercial project which puts theory and modelling into practice.

Candidate Profile: Minimum Masters' level degree in Artificial Intelligence (AI) with relevant practical / work experience in the field. A PhD would be desirable.

Skills/ experience required include:

Essential:

- ▶ Robust knowledge and demonstrable project experience in machine learning, and Generative AI / Large Language Models (LLMs)
- ▶ Detailed knowledge of the SDLC and models for measuring software development team's performance and quality
- ▶ Natural Language Processing
- ▶ Good communication skills at all levels including the ability to train staff and work with diverse user groups
- ▶ Strong time management skills
- ▶ Ability to problem solve

Experience in the following would be desirable:

- ▶ Experience in a research or commercial environment in a similar sector or application domain.
- ▶ Experience of software development and overall understanding of the gaming industry.
- ▶ Experience of performing research in measuring and/or optimising the software development process in an industrial setting.
- ▶ Automated annotation of data assets
- ▶ AI-enabled data classification and profiling
- ▶ Data mining
- ▶ Gen-AI prompt engineering

- ▶ Training LLMs, such as GPT-4 and Llama 2
- ▶ Gaming software development

- ▶ Productivity assessment and optimisation in game development
- ▶ Project management
- ▶ Producing academic publications of the highest standards
- ▶ Technical writing and reporting

Main duties and Responsibilities

- ▶ Elicit developers' skills, requirements and preferences to build productivity scores requiring good communication and interpersonal skills.
- ▶ Ensure data is appropriately analysed, semantically annotated, and classified.
- ▶ Data mining to identify correlations between data features and productivity score.
- ▶ Managing 'hallucination' responses from the LLM and developing a fully trialled near zero-hallucination end-to-end Smart Productivity Optimisation Platform (SPOP).
- ▶ Conduct user-centric testing to incorporate user feedback into the SPOP.
- ▶ Integrate the developed SPOP into EA's UI and business pathways for rollout.

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 and students.
- ▶ 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.
- ▶ Work closely and collaboratively with the rest of the team observing the cooperative values of self-help, self-responsibility, democracy, equality, equity and solidarity.

Person specification

	Essential	Method of assessment
Education and qualifications	▶ Minimum Masters' level degree in Artificial Intelligence (AI) with relevant practical / work experience in the field.	Application form
Experience	▶ Robust knowledge and demonstrable project experience in machine learning, and Generative AI / Large Language Models (LLMs) ▶ Natural Language Processing ▶ Detailed knowledge of the SDLC and models for measuring software development team's performance and quality	Application form and interview
Aptitude and skills	▶ Good communication skills at all levels including the ability to train staff and work with diverse user groups ▶ Strong time management skills ▶ Ability to problem solve	Application form and interview

	Desirable	Method of assessment
Education and qualifications	▶ PhD in Artificial Intelligence (AI) with relevant practical / work experience in the field.	Application form
Experience	▶ Experience in a research or commercial environment in a similar sector or application domain. ▶ Experience of software development and overall understanding of the gaming industry. ▶ Experience of performing research in measuring and/or optimising the software development process in an industrial setting.	Application form and interview

|	Desirable	Method of assessment
Aptitude and skills	▶ Automated annotation of data assets ▶ AI-enabled data classification and profiling ▶ Data mining ▶ Gen-AI prompt engineering ▶ Training LLMs, such as GPT-4 and Llama 2 ▶ Gaming software development ▶ Productivity assessment and optimisation in game development ▶ Project management ▶ Producing academic publications of the highest standards ▶ Technical writing and reporting	Application form and interview

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.
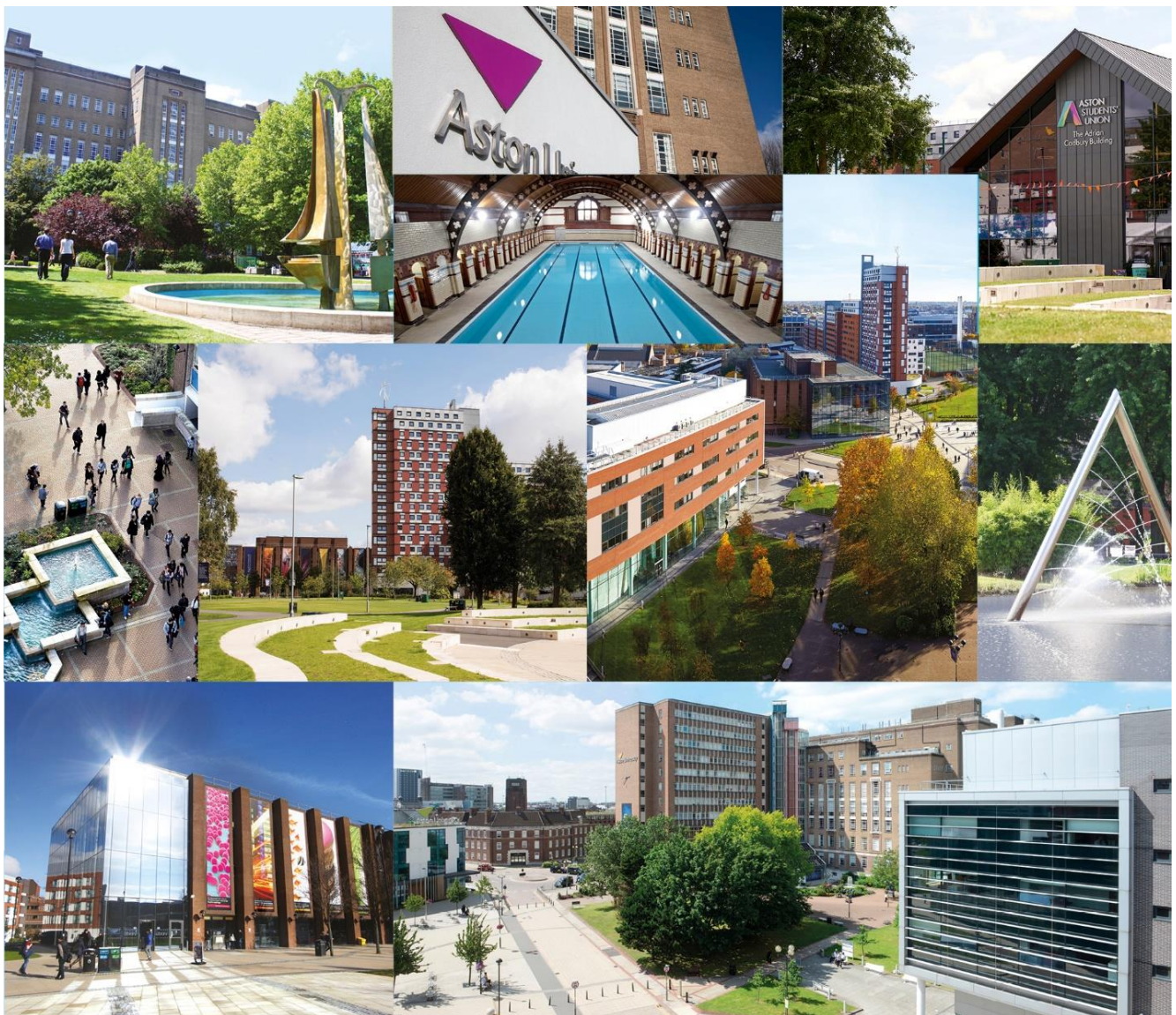
Contact information

Enquiries about the vacancy:

Name: Dr Harry Goldingay

Job Title: Senior Lecturer at School of Computer Science and Digital Technologies, College of Engineering and Physical Sciences

Email: h.j.goldingay@aston.ac.uk

Enquiries about the application process, shortlisting or interviews:
Recruitment Team via recruitment@aston.ac.uk or 0121 204 4500.

Additional information

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](#).

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

Aston University
Birmingham
B4 7ET, UK.

+44 (0)121 204 3000

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