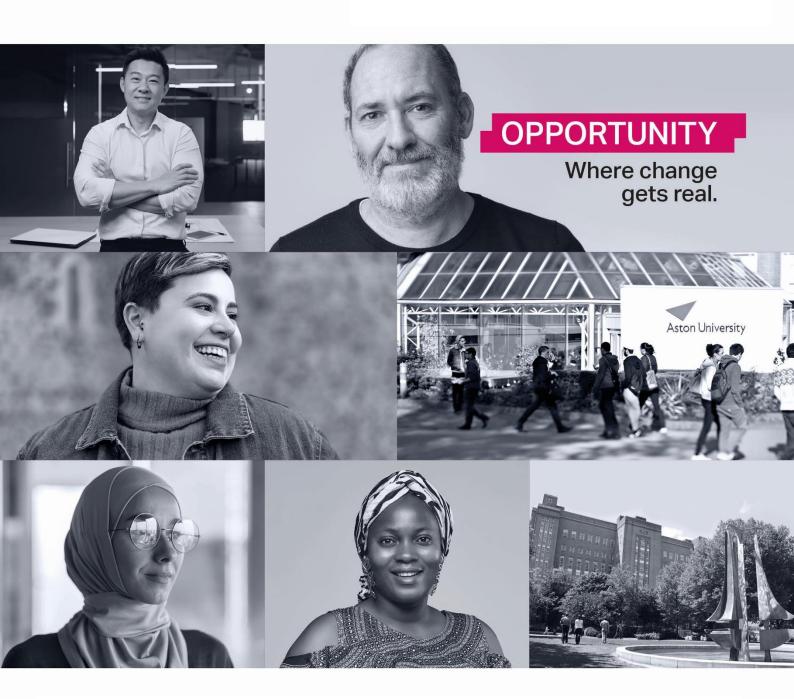
# **Al Software Developer – KTP Associate**



**Reference: 0826-25** 

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 <u>Knowledge Transfer Partnership</u> (KTP), which provides you with practical and formal training and the availability of support from experienced mentors from <u>BioCare Ltd</u>, <u>Aston University</u> and <u>Innovate UK Business Connect</u>.

### Job Purpose:

This Knowledge Transfer Partnership (KTP) project will develop a digital mobile / web application that utilises the latest advancements in AI to deliver personalised nutrition and lifestyle recommendations based on a unique model of health combining a deep understanding of Genetics, Body Systems and the Environment.

BioCare specialise in professional food supplements, with a mission to 'Shape a Healthier Society'. BioCare follows a holistic, naturopathic philosophy and is recognised as a reliable expert in health and wellness. Core activities include developing high-quality nutritional supplements, offering expert clinical and product advice through in-house qualified Nutritional-Therapists, and award-winning B2B education and professional guidance sharing evidence-based knowledge via educational platforms, webinars and events.

The KTP associate will be fully integrated within BioCare and will spend the majority of the project at their premises in Redditch. BioCare operates a hybrid working policy with 3 days in the office and 2 days working from home, which the KTP associate will be expected to follow.

#### The KTP will focus on:

- 1. Advanced AI and data science, including Machine Learning (ML) and Deep Learning (DL) modelling / algorithms.
- 2. Best practice data management considering handling large volumes of sensitive data securely, while ensuring sufficient genetic data is available to train the model.
- 3. Al-based decision system for personalised nutrition and supplement recommendations.
- 4. Mobile app development for the purpose of health data collection and analysis i.e. data insight platform, with "human" i.e. Nutritionist, in the loop for additional support.

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 MSc degree in AI, Machine Learning (ML), Data Science, or relevant subject with minimum two years of industry experience. A PhD would be desirable.

### Skills/ experience required include:

### **Essential**

- Advanced AI and data analytics, including ML algorithms and advanced data analytics techniques.
- Experience of full stack development of web and mobile applications (iOS/Android) including frameworks such as React, Native, Flutter.
- Python programming language.
- > Experience with cloud platforms (such as AWS, Azure or GCP) and modern DevOps practices.
- Experience of designing software for, and deploying software to end users.
- Data management and security.
- Workflow and data automation.
- Complex problem-solving skills.
- Good time management and adhering to deadlines.
- > Ability to present results and findings in a clear and concise way to various audiences.
- Ability to work as part of the team and independently.

### **Experience in the following would be desirable:**

- Knowledge or exposure to Al-based decision support systems.
- > Prior experience of conducting research, project management tools and techniques would be an advantage.
- > Experience in designing and deploying user-facing software or mobile applications with awareness of user-centred design principles.
- Experience in digital health, personalised health or nutrition technology, and health informatics.
- Familiarity with health data standards for interoperability (FL7, FHIR).
- ➤ Knowledge of regulatory frameworks relevant to medical and wellness apps.

# Main duties and Responsibilities

- Develop and implement an advanced Al-powered personalised health recommendation
- > system based on genetic and lifestyle data.
- > Data handling and processing challenges must be addressed to ensure data used to build the app is sufficient, relevant and of high quality.
- Sound understanding of state-of-the-art Machine Learning (ML) and Deep Learning (DL) models, developing and optimising advanced predictive models, Reinforcement Learning and Explainable Al-approaches.
- Develop the mobile / web apps and securely integrate the developed AI systems while maintaining GDPR, NHS DTAC and ethical standards.
- Work with various stakeholders with diverse backgrounds, including software developers, nutritionists, and healthcare practitioners.
- Manage expectations and communicate complex AI concepts coherently ensuring, relevance / accessibility for non-technical users.
- > Responsible for the digital transformation roadmap, from the analogue-based Adaptive Health
- > system to an intelligent digital platform, ensuring on-time and effective delivery, managing resources and
- > steering the whole project.

### 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 MBD team observing the cooperative values of self-help, self-responsibility, democracy, equality, equity and solidarity.
- Attend meetings & complete reports in a timely manner and undertake all duties and responsibilities as required by the role in line with the company processes and procedures.
- Develop effective relationships and communication lines with key suppliers and partners, including internal departments.
- Be involved in productivity workshops to improve efficiency and manage operating costs.
- Make suggestions for improvement and help implement agreed actions by participation in improvement projects.
- Respect company safety rules and handbook regulation at all times; identify and immediately notify any risks to the Management Team.
- Maintain a safe and clean working environment in order to comply with defined company and industry standards.

# Person specification

	Essential	Method of assessment
Education and qualifications	Minimum MSc degree in AI, Machine Learning (ML), Data Science, or relevant subject with minimum two years of industry experience.	Application form
Experience	<ul> <li>Advanced AI and data analytics, including ML algorithms and advanced data analytics techniques.</li> <li>Experience of full stack development of web and mobile applications (iOS/Android) including frameworks such as React, Native, Flutter.</li> <li>Python programming language.</li> <li>Experience with cloud platforms (such as AWS, Azure or GCP) and modern DevOps practices.</li> <li>Experience of designing software for, and deploying software to end users.</li> <li>Data management and security.</li> <li>Workflow and data automation.</li> </ul>	Application form and interview
Aptitude and skills	<ul> <li>Complex problem-solving skills.</li> <li>Good time management and adhering to deadlines.</li> <li>Ability to present results and findings concisely to various audiences.</li> <li>Ability to work as part of the team and independently.</li> </ul>	Application form and interview

	Desirable	Method of assessment
Education and qualifications	A PhD in AI and/or Machine Learning (ML) with minimum two years of industry experience.	Application form
Experience	<ul> <li>Knowledge or exposure to Al-based decision support systems.</li> <li>Prior experience of conducting research, project management</li> </ul>	Application form and interview

Desirable	Method of assessment
tools and techniques would be an advantage.  Experience in designing and deploying user-facing software or mobile applications with awareness of user-centred design principles.  Experience in digital health, personalised health or nutrition technology, and health informatics  Familiarity with health data standards for interoperability (FL7, FHIR)  Knowledge of regulatory frameworks relevant to medical and wellness apps.	

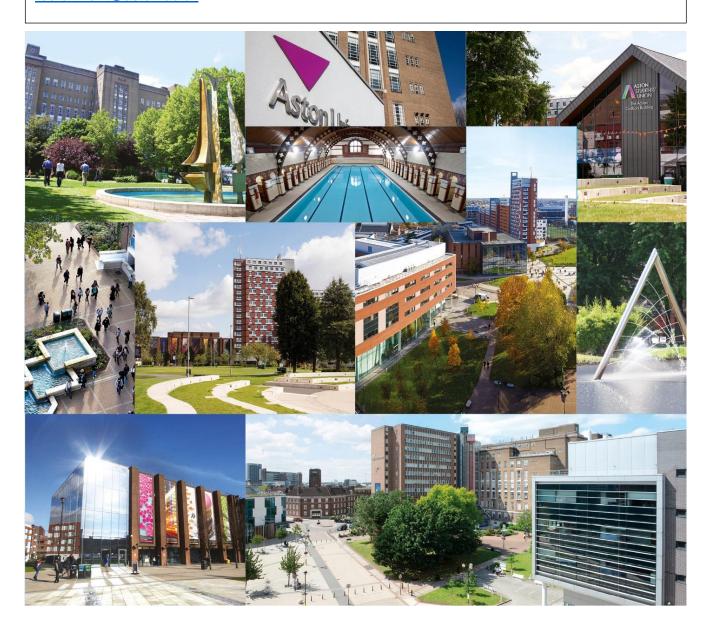
# How to apply

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

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 <a href="mailto:recruitment@aston.ac.uk">recruitment@aston.ac.uk</a>.



## **Contact information**

### **Enquiries about the vacancy:**

Name: Dr Harry Goldingay

Job Title: Senior Lecturer in Computer Science, College of Engineering and Physical Sciences and a member of

the Aston Centre for Artificial Intelligence Research and Applications (ACAIRA)

Email: h.j.goldingay1@aston.ac.uk

Name: Dr Shereen Fouad

Job Title: Senior Lecturer in Department of Applied AI and Robotics, Senior Fellow of the Higher Education

Academy (SFHEA) and Programme Lead for MSc in AI for Health

Email: s.fouad@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 <a href="English language standards">English language standards</a>. 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 <a href="https://www.gov.uk/tier-2-general">https://www.gov.uk/tier-2-general</a>

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, <u>but</u> 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 <u>Midland Landlord Accreditation Scheme</u> 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 <a href="https://www2.aston.ac.uk/data-protection">https://www2.aston.ac.uk/data-protection</a>. 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 <a href="https://www2.aston.ac.uk/staff-public/hr/policies">https://www2.aston.ac.uk/staff-public/hr/policies</a>

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