



# ML Engineer for Traffic Modelling-KTP

## Associate

**Reference:** R220272

**Salary:** £32,000 with up to £5,000 dedicated personal and professional development budget

**Contract Type:** 30 months (fixed term)

**Basis:** Full Time

# Job description

This 30-month project takes the form of a Knowledge Transfer Partnership (KTP) (<http://www.ktponline.org.uk>), which provides you with practical and formal training and the availability of support from experienced mentors from [Agilysis Limited](#), [Aston University](#) and [Innovate UK](#).

## **Job Purpose:**

This KTP aims to develop a predictive Air Quality model for transport planning applications, enhancing the integration between actions to promote safe and sustainable travel with improvements in air quality.

## **The aim of the project:**

This KTP aims to develop a predictive Air Quality model for transport planning applications, enhancing the integration between actions to promote safe and sustainable travel with improvements in air quality. The KTP will be particularly novel as no current equivalent product exists in the market, nor do the techniques feature in the academic literature at sufficient readiness level, so the team will be working to develop a ground breaking solution.

The highly novel nature of the proposed KTP will challenge the Associate to extend the latest academic research and translate it into a viable commercial product. They will be challenged to quickly assimilate the latest advances in machine vision and multi agent systems and apply the latest thinking to develop a novel solution which will have both commercial and academic impact. Developing techniques which do not feature in current literature at sufficient readiness level will be a genuinely exciting challenge for an Associate and offers the potential for them to become a future leader in this field.

The Associate's personal development plan will include targeted training to ensure they have the core expertise to deliver the project, either in professional training or through access to appropriate taught modules / academic mentoring at Aston.

## **Main duties and responsibilities**

- ▶ The Associate will have responsibility for development of a new product and working collaboratively with the Data Analysis team at Agilysis to embed new skills and with commercial staff to launch the new product.
- ▶ Capturing Vulnerable Transport Modes in traffic simulation – modelling the behaviour and impacts of pedestrians, cyclists and micromobility users.
- ▶ Work closely with staff across all functions to embed the skills through collaboration.

## **Additional responsibilities**

- ▶ Present project progress across the company.
- ▶ Work independently on own initiative and/or as part of a team as and when required.
- ▶ Ask questions and constructively challenge.
- ▶ Manage the financial aspects of the project and liaise with Aston Finance and administration staff to develop expenditure forecasts and present justifications for spending from the project budget.
- ▶ 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.

**Additional Benefits**

- ▶ Up to £5,000 for personal and professional development for the duration of the project

## Person specification

	Essential	Method of assessment
<b>Education and qualifications</b>	PhD in a data science related topic, or MSc in Computer Science/ Mathematics or related field.	Application form
<b>Experience</b>	Expertise in data analytics, particularly in Machine Learning and Computer Vision.  Working with Multi-agent systems, GIS, Air Quality	Application form and interview
<b>Aptitude and skills</b>	Ability to demonstrate numerical and machine learning software skills in e.g. MATLAB, Python.  Ability to innovate and initiate work in a practical environment	Application form and interview

	Desirable	Method of assessment
<b>Aptitude and skills</b>	Experience of supervised and unsupervised machine learning techniques	Application form and interview

## How to apply

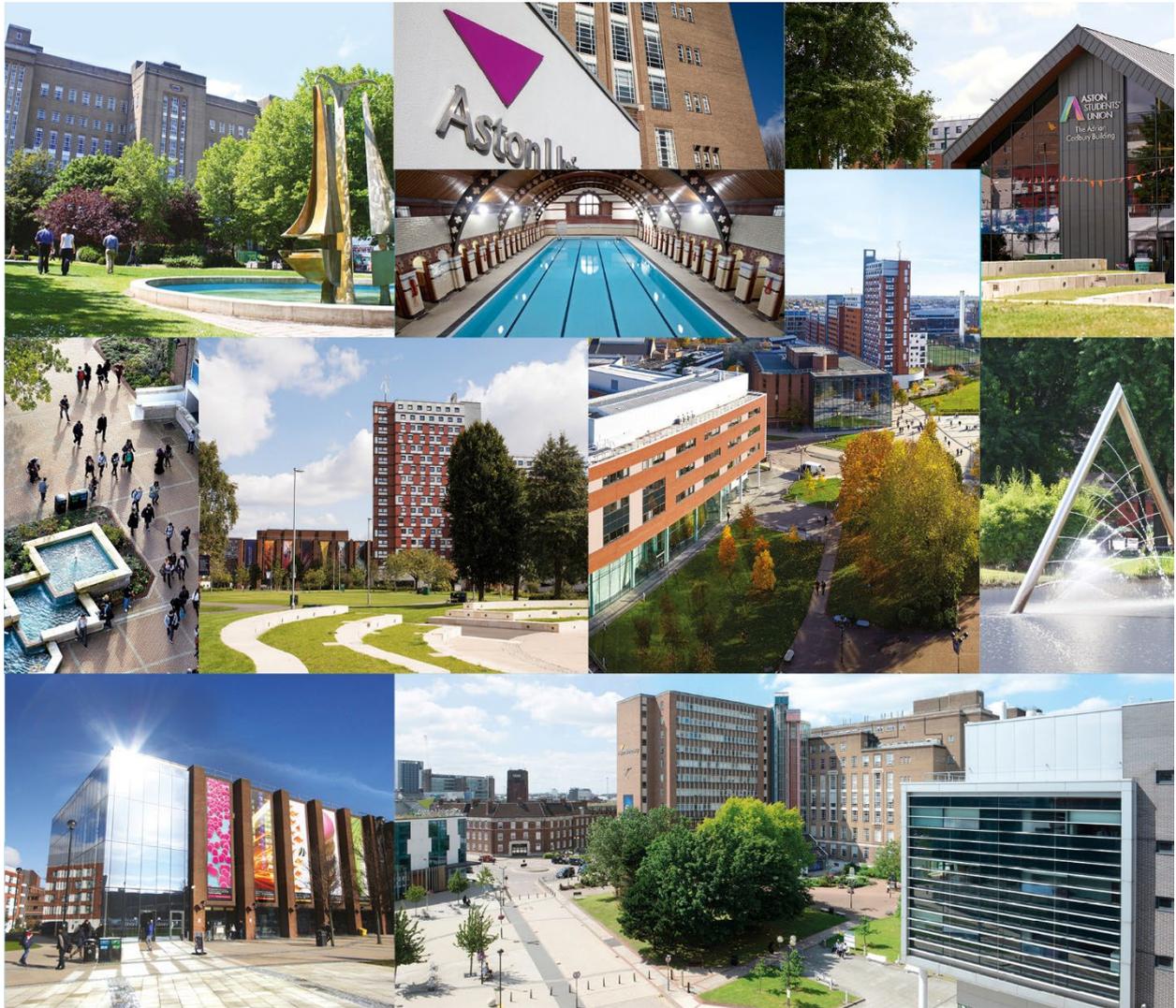
You can apply for this role online via our website <https://www2.aston.ac.uk/staff-public/hr/jobs>.

Applications should be submitted by 23.59 BST 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 [jobs@aston.ac.uk](mailto:jobs@aston.ac.uk).



## Contact information

### Enquiries about the vacancy:

Name: Dr Maria Chli

Job Title: Reader in Informatics and Digital Engineering

Email: [m.chli@aston.ac.uk](mailto:m.chli@aston.ac.uk)

### Enquiries about the application process, shortlisting or interviews:

Recruitment Team via [jobs@aston.ac.uk](mailto:jobs@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:** <https://www2.aston.ac.uk/staff-public/hr/Benefits-and-Rewards/index>

**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:

### Post-Brexit transition period / EU Settlement Scheme

The post-Brexit transition period ended on 31 December 2020. If you are an EU/EEA citizen and you were a resident in the UK before 31 December 2020, you and your family members (including non-EU citizens need to apply to the EU Settlement Scheme to continue to live, work and study in the UK beyond 30 June 2021. The deadline for applying to the EU settlement scheme is 30 June 2021. You can apply via the Government webpage

<https://www.gov.uk/settled-status-eu-citizens-families>

Irish Nationals do not need to apply for settlement as they retain the right to work in the UK.

### New immigration system for EU/EEA and Swiss Nationals who were not resident in the UK before 31 December 2020

A new immigration system has been introduced for people arriving in the UK from EEA countries with effect from 1 January 2021. In addition to those who have always required a visa, EU citizens moving to the UK to work will need to get a visa in advance. You can find more information on the following website. Candidates should check their eligibility to enter or remain in the UK in advance of making any job application via the UKVI website <https://www.gov.uk/browse/visas-immigration/work-visas>. Before applying you should ensure that you meet the requirements, including meeting the English Language requirements. If you do not meet the eligibility criteria, any application for a work visa would be unsuccessful. If you require a visa to work in the UK the most common types of visa are:

#### Skilled Worker Visa

<https://www.gov.uk/skilled-worker-visa>

#### Global Talent Visa

If you are a leader or potential leader in one of the following fields you may be eligible to apply for a Global Talent Visa:

- Academia or Research
- Arts and Culture
- Digital Technology

Please click the following link for further information and to check your eligibility for this visa. <https://www.gov.uk/global-talent>

**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**  
**aston.ac.uk**



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gets real.**