
Department for Transport – Artificial Intelligence Impact Assessments

TIN-DFT-002

About the Organisation

The Department for Transport is responsible for providing policy, guidance and funding to English Local Authorities, and its 27 Arm's Length Bodies including the National Highways, Maritime and Coastguard Agency and the Civil Aviation Authority. The DfT family employs around 18,000 civil servants, has total budget of over £30Bn and works with 153 local authorities to deliver on its strategic priorities:

- Grow and Level Up the Economy
- Improve Transport for the User
- Reduce Environmental Impacts
- Increase our Global Impact
- Be an Excellent Department

Aligning with the UK National AI Strategy and the Office for AI policy paper, DfT recognises that it has a critical role to play in supporting the responsible growth and adoption of the AI industry. DfT is already a frontrunner in creating world-first regulatory frameworks in areas such as Self-Driving Vehicles, as well as supporting research and development initiatives. To scale its use of AI, DfT is interested in developing a governance framework for responsible AI trials.

Role Description and Responsibilities

This role is positioned within DfT's Science Innovation and Technology (SciTech), in the directorate of Prof. Sarah Sharples, the DfT Chief Scientific Advisor. It will be reporting directly to the Head of Artificial Intelligence and Autonomy Technologies of the Department, while collaborating closely with the Digital, Data and Analysis Teams.

The successful candidate will lead a project focussed on producing a suitable governance framework and impact assessment for internal AI projects (including Machine Learning) of DfT. This will require adapting existing DfT documents and processes, to be suitable for AI projects, and providing guidance to users on key considerations. There is a plethora of potential applications for AI projects of the department, for example Natural Language Processing for policy and consultation, Machine Vision for sensors and security and anomaly analysis on the performance of the network. DfT is keen to explore these opportunities and to establish a risk-based Equality, Data Protection and Algorithmic Impact assessment.

You will need to have a good understanding of AI Ethics, AI Governance and of practical considerations of ethics assessments. This is an opportunity to have a significant impact in shaping the governance for the future transport network, ensuring it is benefiting from new technologies, while being fair and inclusive.

Turing Internship Network – Fall 2022

The last part of the project will be to create a governance flow diagram, making it easy to DfT teams that wish to create an AI project, which will also contextualise the Impact Assessments developed.

Expected Outcomes

The expected outcomes of this work will be an Impact Assessment pack that can be included in a DfT project initiation document and ongoing monitoring. An additional outcome would be a flow chart mapping the governance process of starting, developing, deploying, and monitoring an AI project. These will be based on the DfT ethical approach to AI, and will be presented in a future Science Advisory Council meeting.

Supervision and Mentorship

The intern will work closely with the Emerging Technologies team at DfT, reporting to the Head of AI and Autonomy Technologies, as well as the Chief Scientific Advisor. While there will be ongoing and close communication with the team, the candidate is expected to be able to work with minimal supervision between meetings.

Person Specification

The ideal candidate will have a **strong background on AI ethics and Governance**, as well as an understanding of practical limitations of assessment methodologies (e.g. in terms of monitoring or explainability) that need to be accommodated. They should also be up to date with current international development in the field of AI governance. The ideal candidate will have completed (or is close to completing) a doctorate on a related field.

The candidate is expected to be pro-active and be able to form collaborative partnerships with other parts of DfT, whose input and collaboration will be needed. An ability to explain complex terms in practical ways will be highly valued. Previous experience in developing AI/ML is desirable but not essential.

Internship Logistics

Start Date: January 2023

Duration: 3 months (This is a full-time position, and we regret that we are unable to consider part-time applications. Only students who possess the Right to Work full time in the UK are eligible to apply).

Location: London, Birmingham OR Hybrid

Remuneration: £32,000 p/a pro rata (inclusive of London allowance)