
Ministry of Justice – Can AI identify crimes in narrative accounts?

TIN-MOJ-004

About the Organisation

The Ministry of Justice (MoJ) is a ministerial government department responsible for running over 100 prisons, 500 courts in England and Wales, as well as probation services. The department's priorities are to protect the public from serious offenders, to improve the safety and security of our prisons, reduce reoffending, and deliver swift access to justice. The MoJ works with many other government agencies including HM Prison and Probation Service (HMPPS) and Youth Justice Board (YJB). The department conducts an extensive programme of analytical and research-based work, helping to deliver a world class justice system. Diverse teams of experts from different fields work together to conduct research reviews, commission research, provide justice statistics and secondary data analysis, cost benefit analysis, forecasting, advanced analytics and data engineering.

Role Description and Responsibilities

Less than half of the British public know what to do when faced with a legal situation¹. This is hardly surprising given the volume and complexity of legislation: there were 64 new acts passed by parliament in the 2022/23 session alone². Expecting the public to be aware of the implications of all of these is unrealistic. The Ministry of Justice is committed to using technology to improve transparency and increase accessibility of legal avenues.

The purpose of this project is to research the feasibility of using AI to interpret narrative accounts of potential crimes and point users towards relevant services.

Take, for example, the following narrative account:

“My neighbour knocked down my fence whilst I was on holiday. They claimed they did it because there was a storm, and the fence was hanging onto their side and could have fallen onto their toddler. Before I went on holiday it was fine and my other neighbour says they saw it after the storm, and it was standing upright.”

Has a crime been committed? What recourse does the complainant have? The successful candidate for this role will build a tool which is able to answer those questions and point to relevant legislation.

If this project is successful, it could completely transform how a complainant enters the criminal justice system. The potential impact of making it easier for victims to access information,

¹ [2015 study by Hodge Jones & Allen](#)

² [Parallel Parliament](#)

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assess laws, and find relevant services is enormous.

Expected Outcomes

The successful candidate will be provided with a small number of narrative accounts of potentially criminal activity, along with a corpus of legislation. The task will be to build a tool which can interpret the accounts and ascertain whether criminal activity has taken place, and if so, which laws have been broken. If this is successful, we will explore the possibility of extending the tool to signpost local services (government or charity) which might be relevant to the victim or the potential legal avenues available to the victim.

Note that the tool will purely be as a proof-of-concept. There is no expectation that the candidate will have skills in deploying operational tools to production.

Supervision and Mentorship

The intern will be managed by a colleague from the AI for Linked Data team.

Supervision will also be provided by Dr Jonathan Bright at the Turing Institute.

Person Specification

Essential criteria

- A strong academic background in a relevant field, such as computer science, mathematics, statistics, data science, or a related area.
- Experience in natural language processing. This could take many forms including adapting (by fine-tuning or probing) pre-trained models for downstream tasks; prompt-engineering and developing large-language model solutions for real world problems; creating systems using retrieval-augmented generation.
- Proficiency in Python.

Desirable criteria

- Excellent communication skills, both written and verbal, with the ability to present complex technical concepts to diverse audiences.
- Project management skills and ability to build relationships with stakeholders for implementation of real-world solutions.

Internship Logistics

Start Date: May 2024

Salary: £35,000 per annum pro rata.

Location: London or national hubs

Security Clearance: BPSS baseline clearance is required (this can be arranged after the successful candidate is chosen) as well as training and signing of internal agreements with respect to each data source.

Internship Duration: Full-time, from 3 to 6 months (part-time option available).

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The intern would join as a civil servant. MoJ policy is to attend the headquarters in London or national hub twice a week. Fully remote working is also an option.

There are strict nationality rules for civil servants. Only the nationals represented in this list can be employed as civil servants:

- UK nationals
- Nationals of Commonwealth countries who have the right to work in the UK
- Nationals of the Republic of Ireland
- Nationals from the EU, EEA or Switzerland with settled or pre-settled status or who apply for either status by the deadline of the European Union Settlement Scheme
- Relevant EU, EEA, Swiss or Turkish nationals working in the Civil Service
- Relevant EU, EEA Swiss or Turkish nationals who have built up the right to work in the Civil Service
- Certain family members of the relevant EU, EEA, Swiss or Turkish nationals