

Knowledge Transfer Partnership

Job description

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| **Post Title:** | Graduate Software Engineer - Artificial Intelligence – KTP Associate |
| **Faculty/Service:** | Faculty of Environment and Technology |
| **Accountable to:** | Academic Supervisor – Mehmet Aydin |
| **Accountable for:** | No line management responsibility |
| **Post no:** | 1775964 |
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Job purpose

To carry out the Knowledge Transfer Partnership (KTP) project 11481 between UWE Bristol and Lyons Davidson Ltd, whose objective is to establish an automated legal advice helpline utilising complex Artificial Intelligence (AI) that can deliver suitable solutions to a wide range of possible enquiries. The post holder will work with Lyons Davidson and UWE staff to analyse and capture the knowledge within Lyons Davidson’s existing legal advice provision, and then develop text and speech-based AI systems that enable Lyons Davidson to provide an improved and more cost-effective client support.

Duties and responsibilities

**Main Duties**

To lead the KTP project, carrying out tasks as specified in the project work plan and/or as agreed by the Local Management Committee of the KTP, to include:

1. Conduct stakeholder analysis and elicit project requirements.
2. Carry out analysis of Lyons Davidson current support provision.
3. Conduct research to identify and formulate suitable speech/text recognition, knowledge-based systems and machine learning approaches to inform the conceptualisation and design of ‘proof of concept’ software.
4. Produce initial concept and design.
5. Consistent with best development practices of Lyons Davidson, develop and test ai-based solutions in ‘proof of concept’ software.
6. Ensure stakeholder engagement throughout development.
7. Ensure knowledge transference throughout Lyons Davidson by documenting findings.
8. Formulate future product development plan.
9. Disseminate project outcomes to internal and external audiences both academic and non-academic.

**Responsibilities**

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| 1. To deliver the project in accordance with the requirements of the KTP programme 2. To comply with the University's equal opportunities policy, and use this role to promote equal opportunity wherever possible. 3. To take responsibility of your own health and safety and comply with rules and guidance relating to health and safety matters. 4. Any other reasonable duties that fall within the scope of the post, as allocated by the line manager, following consultation with the post holder. 5. To work as part of a team, working in a flexible way to ensure the team meets its objectives and timescales. 6. To organise and prioritise own work to ensure it is completed to agreed timeframe. 7. To make suggestions and implement process improvements where required |

Person specification

**Qualifications**

**Essential**

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| 1st or 2.1 Bachelors, or Masters level degree in Computer Science or related subjects, with a strong Machine Learning/Artificial Intelligence course content, or post academic ML/AI courses. |

**Knowledge/Skills/Experience**

**Essential**

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| 1. Previous experience of applying Machine Learning/ AI-based approaches to a significant real-world problem. 2. Proficiency in programming with one or more high-level programming languages such as C#, Python and Java. 3. Experience of using team-based software development approaches (e.g. agile methodologies), practices (e.g. time-boxed, continuous integration and stakeholder communication), and development tools (e.g., Jira, Github etc.). 4. Excellent communication skills, including the ability to explain technical concepts in layman's terms 5. Ability and desire to understand the business domain and engage with non-technical staff and clients. 6. Excellent time management and organisational skills and ability to meet deadlines. 7. Willingness to learn and ability to fill in knowledge gaps independently |
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**Desirable**

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| 1. A real interest in ML/AI and its application to real world problems and systems. 2. Experience of creating systems in Python that exploit existing AI / ML toolkits, such as TensorFlow, Keras etc. 3. Familiarity with speech recognition systems. 4. Familiarity with Microsoft cloud-based environments 5. Some experience in programming with SQL and using Microsoft SQL Server Management Studio |

**Key Competencies**

**Essential**

1. Leadership and motivation

Demonstrates integrity, fairness, equality and consistency when working with colleagues in a team. Provides guidance, constructive feedback and support to motivate colleagues.

1. Planning and organising to achieve results

Is able to plan and co-ordinate work appropriately to make the best use of resources and to achieve targets. Communicates and monitors achievement against plans.

1. Delivering excellent service

Delivers excellent customer service and suggests improvements.

1. Continuous improvement, innovation and change

Has a ‘can do’ attitude and fosters this amongst colleagues/team members. Respond positively to changing situations.

1. Communicating and influencing

Has highly effective communication skills both verbal and written. Establishes positive and effective working relationships by meeting regularly with colleagues, encouraging feedback, and through setting up effective networks.

1. The ability to develop yourself

Demonstrates active management of personal and professional development.

Special conditions

Employed by University of the West of England under the Knowledge Transfer Partnership (KTP) programme, you will be based at Lyons Davidson office in Bristol and work under the supervision of staff from Lyons Davidson and the Department of Computer Science and Creative Technologies in the Faculty of Environment and Technology at UWE.

This post will be subject to University Terms and Conditions, but the appointee will be expected to abide by Company rules including Health and Safety when on Lyons Davidson premises.

KTP Associates are expected to spend around 10% of their time on training and personal development, and have a training budget of £2,000 per year. Management skills training is also provided by the national KTP programme.

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Health and Safety/Risks

This post has been identified with the following risks: (activities, hazards or exposures)

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| **Risk 1** | **Risk 2** | **Risk 3** | **Risk 4** | **Risk 5** |
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