

# JOB DESCRIPTION

<b>Vacancy reference:</b>	KT20004
<b>Post Title:</b>	KTP Associate in Artificial Intelligence for Healthy, Productive Workplaces
<b>Grade:</b>	Ad-hoc £32,000 - £42,000 pa depending on qualifications and experience
<b>School/Department:</b>	School of Build Environment
<b>Reports to:</b>	Dr Zhiwen Luo (Academic supervisor, UoR) and Rudi Du Plessis (Industrial supervisor, LCMB)
<b>Responsible for:</b>	none

## Purpose

The University of Reading (School of the Built Environment) is delighted to be working on a collaborative Knowledge Transfer Partnership (KTP) with Oxfordshire based LCMB Building Performance Ltd.

We have an exciting opportunity to deliver the project using advanced machine learning and artificial intelligence methods to develop a software solution which improves building efficiency and indoor environmental optimisation, providing increased return on investment from existing real estate by creating healthier, sustainable and more productive workplaces.

The position requires someone who is excited by new technologies and is keen to develop and lead on a project delivering commercial outputs. The role will involve applying machine learning methods into indoor environmental performance diagnostics and optimization and developing new prototypes and platform from the outset therefore, excellent programming and data analytical skills are essential with experience in one or more of the areas listed.

Due to the advanced technical nature of the project, the KTP Associate will ideally hold at least a 2.1 (or equivalent) in a Masters degree or higher (PhD) in Computer Science, Mathematics, or another quantitative field (engineering related) with a demonstrated understanding of AI and ML and strong interest to apply them into the real-world problems. Previous experience of applying AI and ML in the Built Environment (e.g., smart building, smart grid, smart city etc) is desirable but not essential.

The position is a 24-month fixed term contract based full-time at LCMB in Oxford with support from experts at the University of Reading.

The KTP Associate will also communicate the outcomes of the project both internally and externally to relevant identified parties.

There is regular contact between the academic team and the KTP Associate which may involve trips to the University of Reading.

## Main duties and responsibilities

The KTP Associate will have key responsibilities for:

Working with the KTP project team to improve the performance of the LCMB workplace performance prototypes and methodologies

Extend their commercial knowledge by working with the KTP project team to research and launch new customer centric value adding solutions

Transferring knowledge to LCMB staff and running staff training to ensure knowledge and expertise is fully embedded within the organisation

Articulating complex information to a simple and easily understandable language for presentations to customers and the wider industry, possibly in the format of a brochure

Presenting project findings to stakeholders and disseminating research via scientific publications, seminars and presentations at conferences or events.

The KTP Associate will report on progress and result of the KTP to The University of Reading, LCMB and the funders of the KTP project Innovate UK.

### **Supervision received**

Day to day supervision will be provided by Rudi Du Plessis, Director of Operations at LCMB. This will be supplemented with regular visits and inputs from the academic team; Dr Zhiwen Luo and Professor Li Shao (School of the Built Environment) with additional expert support from Dr Weizi Li (Henley Business school) both at the University of Reading.

### **Supervision given**

None.

### **Contact**

Regular contact will be with key partners involved with the KTP project; including appropriate contacts at LCMB, such as senior and junior consultants, and the relevant academic teams from the School of Built Environment and Henley Business School.

### **Terms and conditions**

This is a full-time, fixed term (24 months) position. A combination of the University of Reading and LCMB T&Cs will be used. The KTP Associate will be supplied with T&Cs from LCMB which will be effective and work alongside the University of Reading T&Cs. Holiday entitlement will reflect LCMB policy plus statutory public holidays.

This document outlines the duties required for the time being of the post to indicate the level of responsibility. It is not a comprehensive or exhaustive list and the line manager may vary duties from time to time which do not change the general character of the job or the level of responsibility entailed.

### **Date assessed:**

23 Sept 2020

# PERSON SPECIFICATION

Job Title	School/Department
KTP Associate in Artificial Intelligence for Healthy, Productive Workplaces	School of the Built Environment

Criteria	Essential	Desirable
<b>Attainment</b>	<ul style="list-style-type: none"> <li>Strong 2.1 (or equivalent) Masters degree or higher (PhD) in Computer Science, Mathematics or another quantitative area with a demonstrated understanding of AI and ML</li> </ul>	
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>Of the theory and practical application of software engineering/data analytics</li> <li>Ability to adapt this learning to new technical systems</li> </ul>	
<b>Relevant Experience</b>	<ul style="list-style-type: none"> <li>Strong computer programming skills e.g. using Python</li> <li>Data analytics with machine learning</li> <li>Demonstrated ability to apply critical thinking to the development of mathematically-driven solutions</li> <li>Excellent verbal and written communication skills for effective communication of both technical and non-technical information</li> <li>Capable and comfortable to engaging with stakeholders, including clients</li> </ul>	<ul style="list-style-type: none"> <li>Previous experience of applying machine learning into the built environment field e.g., smart building, smart grid, smart city</li> </ul>
<b>Disposition</b>	<ul style="list-style-type: none"> <li>Willingness and interest in developing a commercial awareness and knowledge of the market sectors in which LCMB operates</li> <li>Ability to project manage the KTP while operating independently within a small team</li> </ul>	
<b>Other</b>	<ul style="list-style-type: none"> <li>The ability to work proactively in a small dynamic business environment</li> </ul>	

<b>Completed by: Zhiwen Luo</b>	<b>Date:22 Sept 2020</b>
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