University of Reading

JOB DESCRIPTION

Vacancy reference:	KT20005
Post Title:	KTP Associate – Machine Learning Engineer
Grade:	Ad-hoc
School/Department:	Computer Science
Reports to:	Dr Varun Ojha(Academic Supervisor, UoR), Dr Etienne Roesch (Lead Academic, UoR) and Dr Ben Potter (Industrial supervisor, CrowdCharge)
Responsible for:	none

Purpose

The University of Reading is delighted to be working on a collaborative Knowledge Transfer Partnership (KTP) with CrowdCharge, who are based in Marlow, Buckinghamshire.

We have an exciting opportunity to improve the performance of CrowdCharge's novel Smart Electric Vehicle Charging Platform. This will enable the business to offer a competitive, market-leading service as it scales, bringing cost savings to its customers through optimised vehicle charging.

CrowdCharge is a small and dynamic business at the forefront of electric vehicle (EV) smart charging. CrowdCharge's digital platform automatically ensures that customers' EVs charge at the cheapest and greenest times whilst also managing charging to support the electricity grid.

The position requires someone who is excited about future and emerging technologies as well as green energy and is eager to develop and lead on a project delivering commercial outputs. The role will involve using machine learning and statistical methods to provide enhanced predictions of future EV charging and helping to integrate those predictions into real-time operational systems. The successful candidate will be encouraged to feed into strategic and commercial decisions and be expected to consider these aspects alongside technical development.

The position involves both Data Science and Machine Learning. Due to the advanced technical nature of the project, the KTP Associate will have academic qualifications (minimum 1st Class BSc) and demonstrable experience in Machine Learning, Data Science, Statistics/Applied Mathematics of another related Computing discipline. The role will require professional experience using Machine Learning and statistical models, as well as experience of software development, including UML or SQL, and a programming language such as Python and Jupyter notebooks to analyse systems and demonstrate algorithms. The CrowdCharge platform leverages a range of cloud technologies, including Google Cloud Platform. Familiarity with such frameworks is not essential, but desirable.

The position is a 24-month fixed term contract based full-time at CrowdCharge in Marlow, Bucks with support from academic experts at the University of Reading.

There is a £4k dedicated training budget tailored towards your own personal development in addition to residential management skills training. The KTP Associate will be based at CrowdCharge, but also be invited to join academic events at the University of Reading and other conferences.

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

Due to the nature of the role, a full clean UK driving license will be required as familiarisation and regular driving of an EV will form part of the package.

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

Main duties and responsibilities

The KTP Associate will have key responsibilities for:

Developing and applying machine learning and statistical methods to enhance the company's ability to predict EV charging behaviour.

Managing their project work and reporting to stakeholders on progress.

Considering commercial and strategic aspects alongside technical development

Extend their commercial knowledge by working with the KTP project team to research and understand the latest developments in the sector.

Transfer knowledge to CrowdCharge staff and running staff training to ensure knowledge and expertise is fully embedded within the company.

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

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

Supervision received

Day to day supervision will be provided by Ben Potter, Head of Research & Development at CrowdCharge. This will be supplemented with regular visits, contact and input from the academic team Dr Varun Ojha and Dr Etienne Roesch,

Supervision given

None

Contact

Regular contact will be with key partners involved in the KTP project, including appropriate contacts at CrowdCharge as well as the relevant academic teams from the University of Reading.

Terms and conditions

This is a full-time fixed term 24 months position. A combination of the University of Reading and CrowdCharge T&Cs will be used. The KTP Associate will be supplied with T&Cs from CrowdCharge which will be effective and work alongside the University of Reading T&Cs. Holiday entitlement will reflect CrowdCharge 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:

1 October 2020

PERSON SPECIFICATION

Job Title	School/Department
KTP Associate - Machine Learning Engineer	Computer Science

Criteria	Essential	Desirable
Attainment	• Academic qualification (minimum BSc 1st class) in Machine Learning, Data Science, Statistics/Applied Mathematics or other relevant Computing-related discipline	
Relevant Experience	• Demonstrable experience of software development, inc UML or SQL and programming language such as Python or Jupyter notebooks to solve numerical problems or analyse systems • Demonstrable professional experience using machine learning and statistical models	
Skills	• Excellent verbal and written communication skills for effective communication of both technical and non-technical information • Capable and comfortable to engaging with stakeholders, including clients	
Disposition	• Willingness and interest in developing a commercial awareness • Ability to project manage the KTP project while operating independently within a small team • An interest in developing a career in the smart energy sector and/or the development of AI-enabled systems	
Other	• The ability to work proactively in a small dynamic business environment	

Completed by:	Date: