



**Cardiff
Metropolitan
University**

**Prifysgol
Metropolitan
Caerdydd**

JOB DESCRIPTION

Job Title:	Data Scientist/AI Engineer
Post Number:	NM018XX
Department :	Computing and Information Systems
Location:	Cardiff
Salary:	circa £36,000 (depending on experience, plus an £8k professional development package)
Tenure:	Two-Year Fixed Term Contract
Accountable to:	Professor Tom Crick, Cardiff Metropolitan University

Role Summary:

A full-time Data Scientist/AI Engineer position is available on a collaborative R&D project between Cardiff Metropolitan University and Coup Media, to develop “chatbots-as-a-service”, an infrastructure to enhance enterprise-scale customer services, applying intelligent data-driven approaches to provide deep insight via personality, behaviour and emotion, allowing companies to automate and improve how they support their customers.

This is a two-year Knowledge Transfer Partnership (KTP) project between Cardiff Metropolitan University and Coup Media, funded by Innovate UK with support from the Welsh Government.

Principal Duties and Responsibilities:

- Work collaboratively with the KTP project team at Cardiff Metropolitan University and Coup Media to scope and implement the project;
- Review of literature for the relevant problem domains, target market, key competitive platforms, markets and business models;
- Derive key big social data models and intelligent methodologies for chatbots;

- Design prototype chatbot system and model including key metrics; develop proof-of-concept system including testing;
- Develop proof-of-concept “chatbot-as-a-service” system (and associated infrastructure), including testing.
- Application of machine learning and other data-driven/intelligent approaches;
- Testing, benchmarking and analysis of the tools and methodologies to develop marketable new products/services;
- Convene and lead monthly technical meetings to discuss progress, targets and resources;
- Dissemination and commercialisation e.g. writing high-impact academic outputs and potential follow-on funding, IP protection.
- Complete the compulsory KTP Associate online training modules, alongside any relevant administrative activities.

Additional Information:

This is an exciting interdisciplinary collaborative research project between Coup Media and Cardiff Metropolitan University, building upon their existing computer science, data science and artificial intelligence research and policy expertise, to develop tools, models and enterprise-scale infrastructure for “chatbots-as-a-service”, to provide deep insight via personality, behaviour and emotion, allowing companies to automate and improve how they support their customers through chatbots.

Coup Media has a long-standing track record in delivering high-quality digital marketing, social, media and consultancy solutions to transform and accelerate the way that organisations communicate and engage with their customers. Coup’s growth has been based on significant knowledge and expertise in applying novel approaches to analysing and obtaining insight from big social data to meet client requirements now, as well as attracting new business in the future. This project builds upon Coup’s existing expertise in chatbots and their *IntelAgent* platform (<http://intelagent.ai>).

About the Department:

The Department of Computing & Information Systems at Cardiff Metropolitan University is a rapidly-expanding department based at its Llandaff Campus. There have been substantial strategic investments in data science, informatics and games development across its undergraduate, postgraduate and research portfolio, as well as the proposed new School of Technologies. Its research, knowledge transfer and enterprise interests cuts across data science, big social data, intelligent systems and cyber-physical systems, underpinned by a range of taught undergraduate and postgraduate programmes across computer science, data science, software engineering and business information systems. For more information about the Department see: <http://www.cardiffmet.ac.uk/csm>

About Coup Media:

Coup Media are a leading social, mobile and digital technology agency based in Cardiff, covering everything from community management and app builds to social strategy, advertising and analytics. They develop applications (games, competitions, user generated content platforms) for social media channels such as Facebook and Twitter, as well as building mobile applications, and have significant experience across the movie, fashion, automotive, tourism and financial services sectors. For further information see: <http://www.coupmedia.com/>

To find out more about this position, please contact Professor Tom Crick (tcrick@cardiffmet.ac.uk).

Standard Notification

These guidelines are provided to assist you in the performance of your contract. The university is a dynamic organisation; therefore changes may be required from time to time. Any changes will be made in consultation with the post-holder. The Summary of Duties and Responsibilities is not intended to be an exhaustive list of tasks performed. Other associated technical tasks are likely to be performed as directed by the line manager.

It is accepted that individual staff will have a specialist skills and knowledge base in relation to the role they have been appointed to. In addition to this, Cardiff Metropolitan University expects that all staff will contribute to the vision and ethos of the university and conduct themselves in a professional, courteous and student/customer focused manner at all times. All staff should have particular regard for their responsibilities under Cardiff Metropolitan University's Equalities, Financial, Environmental and Sustainability, Human Resources and Health and Safety policies and procedures.



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PERSON SPECIFICATION

Post: **Data Scientist/AI Engineer**

Unit/School: **Computing and Information Systems**

***Key**

A - Application form

I - Interview

T/P - Test/Presentation

FACTORS	ESSENTIAL AND DESIRABLE CRITERIA	ASSESSED BY		
		A*	I*	T/P*
Education & Qualifications (Essential)	A high-quality undergraduate honours degree in computer science, software engineering, informatics, production engineering, manufacturing engineering or cognate technical/engineering/data-driven fields.	√		
Education & Qualifications (Desirable)	A postgraduate degree in an area relating to data science, artificial intelligence or computer science.	√		
Knowledge (Essential)	Software development using appropriate languages/tools/methodologies.	√	√	
	Knowledge of analysing and manipulating large-scale datasets.	√	√	
Knowledge (Desirable)	Knowledge of analysing and manipulating big social data.	√	√	
	Knowledge of developing and applying AI, machine learning techniques and other data-driven intelligent approaches.	√	√	
	A sound knowledge of research within a university setting.	√	√	

<p>Skills & Abilities (Essential)</p>	<p>Effective interpersonal and presentation skills.</p> <p>Communicate material of a specialist or highly technical nature to a range of technical and non-technical audiences.</p> <p>Good organisational skills with the ability to manage and prioritise own workload.</p> <p>Convene and lead monthly technical team meetings.</p> <p>Ability to act as a responsible member of a team.</p> <p>Broad analytical and problem-solving skills.</p> <p>Good time management skills.</p> <p>Be innovative and creative in analysing and interpreting research data and draw conclusions on the outcomes.</p> <p>Contribute to collaborative decision making with the KTP project team.</p>	<p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p>	<p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p> <p>√</p>	
<p>Experience Paid/Unpaid (Essential)</p>	<p>Experience in the development of software systems outside of formal university education.</p> <p>Technical leadership of software projects.</p>	<p>√</p> <p>√</p>	<p>√</p> <p>√</p>	
<p>Experience Paid/Unpaid (Desirable)</p>	<p>Experience of customer service environments and associated analysis, management and support.</p> <p>Experience of developing chatbots and working with existing commercial chatbot frameworks.</p> <p>Track record of successful high-quality academic publications.</p> <p>Experience of grant formulation and submission to external bodies.</p>	<p>√</p> <p>√</p> <p>√</p> <p>√</p>	<p>√</p> <p>√</p> <p>√</p> <p>√</p>	
<p>Other Requirements (Essential)</p>	<p>Willingness and ability to travel to between Cardiff Metropolitan University (Llandaff Campus) and Coup Media's offices in central Cardiff.</p>		<p>√</p>	