



**Cardiff  
Metropolitan  
University**

**Prifysgol  
Metropolitan  
Caerdydd**

## JOB DESCRIPTION

<b>Job Title:</b>	<b>DevOps Research Engineer</b>
<b>Post Number:</b>	<b>NM019XX</b>
<b>Department :</b>	<b>Computing &amp; Information Systems</b>
<b>Location:</b>	<b>Cardiff</b>
<b>Salary:</b>	<b>c. £25,000</b> (plus an £8k professional development package)
<b>Tenure:</b>	<b>Two-Year Fixed Term Contract</b>
<b>Accountable to:</b>	<b>Professor Tom Crick, Cardiff Metropolitan University</b>

### **Role Summary:**

A full-time DevOps Research Engineer position is available on a collaborative R&D project between Cardiff Metropolitan University and DevOpsGuys, to provide deeper insight into the software development and IT management lifecycle via “digital” supply chains and hybrid data-driven and computational approaches.

This is a two-year Knowledge Transfer Partnership project between Cardiff Metropolitan University and DevOpsGuys, 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 DevOpsGuys to scope and implement the project;
- Review domain literature for the target market, future competitive markets and relevant business models;
- Data collection, cleaning, exploration and visualisation;
- Derive digital supply chain metrics and management models to solve emerging project challenges;
- Design prototype system and model including key metrics; develop proof-of-concept system including testing;
- Evaluating and integrating appropriate high performance computing/cloud computation vendors;
- Application of machine learning and other data-driven and intelligent approaches;

- Testing, benchmarking and analysis of the tools and methodologies to develop marketable new products/services;
- 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 DevOpsGuys and Cardiff Metropolitan University, building upon their existing computer science, data science and supply chain management research expertise, to develop tools, models and approaches to analysing and managing the software development and IT management lifecycle via “digital” supply chains and hybrid data-driven and computational approaches.

### **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 recent strategic investments in data science and informatics, as well as a proposed new School of Technologies in Cardiff city centre. Its research, knowledge transfer and enterprise interests cuts across data science, big social data and intelligent systems, underpinned by a range of taught undergraduate and postgraduate programmes across computer science, data science, software engineering and business information systems. Furthermore, there is substantial expertise in manufacturing and production engineering, as well as supply chain management, in Cardiff School of Management’s Value Flow Centre (VFC). For more information about the Department see: <http://www.cardiffmet.ac.uk/csm>

### **About DevOpsGuys:**

*What We Do...*

We transform and accelerate the way that organisations deliver software.

We believe that DevOps offers a new operating model for IT departments to deliver software at speed and therefore we help large organisations fundamentally change the way they build, deliver and run software.

Making a significant difference to the companies we work with is immensely satisfying.

Our beliefs underpin the culture that we have built at DevOpsGuys:

#### **Teamwork matters**

There is no glory in winning alone

#### **Embrace the journey**

Living at the edge of change is hard

#### **Fail fast, fail safe**

Failure is an option

#### **Love to learn**

Share your experiences

## **Take action**

Through change we bring opportunity

We're extending our team of talented people and require a DevOps Research Engineer with an inquiring mind-set to join our rapidly growing team. **So, are you ready to change the world?** For more information about DevOpsGuys see: <https://www.devopsguys.com>



### ***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: DevOps Research Engineer

Unit/School: Computing & 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 data-driven/computational/engineering fields.	X		
Education & Qualifications (Desirable)	A postgraduate degree in an area relating to computer science, data-driven science or engineering.	X		
Knowledge (Essential)	Experience in the development of software systems.	X	X	
Knowledge (Desirable)	Applying data-driven techniques and computational approaches to solving a variety of domain problems.	X	X	
	Supply chains and associated management methodologies in a real-world context.	X	X	
	Developing and applying machine learning techniques and other intelligent approaches.	X	X	
	Research conducted within a university setting.	X	X	

Skills & Abilities (Essential)	Effective interpersonal and presentation skills.	X	X	
	Communicate material of a specialist or highly technical nature.	X	X	
	Good organisational skills with the ability to manage and prioritise own workload.	X	X	
	Convene and lead monthly technical team meetings.	X	X	
	Ability to act as a responsible member of a team.	X	X	
	Broad analytical and problem-solving skills.		X	
	Good time management skills.		X	
	Be innovative and creative in analysing and interpreting research data and draw conclusions on the outcomes.		X	
Contribute to collaborative decision making with the KTP project team.		X		
Experience Paid/Unpaid (Essential)	Experience in the development of software systems outside of formal university education.		X	
Experience Paid/Unpaid (Desirable)	Exposure to DevOps and Agile methodologies.	X	X	
	Exposure to Jira and Atlassian products.	X	X	
	Experience of real-world supply chains and associated analysis, management and optimisation.	X	X	
	Experience of dealing with large datasets and appropriate open source toolchains.	X	X	
	Track record of successful high-quality academic publications.	X	X	
Other Requirements (Essential)	Willingness and ability to travel to between Cardiff Metropolitan University (Llandaff Campus) and DevOpsGuys' offices in central Cardiff.		X	