THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

PROFESSIONAL SERVICES

DIRECTORATE OF IT SERVICES

DIVISION OF ENGINEERING

SENIOR PLATFORM ENGINEER

VACANCY REF: PSX-027423

Salary:	Grade 7 £46,485 to £56,921 per annum, depending on relevant experience
Hours:	Full Time (1 FTE)
Duration:	Permanent
Location:	Oxford Road, Manchester

Enquiries about the vacancy, shortlisting and interviews:
Name: Nisar Khan
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Overall purpose of the job

The Platform Engineering team is responsible for the management of the Cloud estate (Azure, GCP, AWS) and maturing of DevOps to enable development teams to deliver cloud services at pace.

As part of the Platform Engineering Team, the Senior Platform Engineer takes responsibility for the design, development, integration and configuration of infrastructure as code (IaC) components in order to enable a secure and safe delivery of a software solution.

This role plans and drives development activities and system integrations, as well as builds capabilities including automation of continuous integration pipelines. The post holder also designs large and complex cloud components and works closely with development teams to help create an end-to-end curated CI/CD experience. In addition, the Senior Platform Engineer ensures adherence to appropriate methods, tools and design patterns; monitors standards; and contributes to setting technical best practices, policies, guidelines and architecture. In this role, the post holder provides subject matter advice on automation, API integration and service design.

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Responsibilities, accountabilities and duties

Platform delivery and optimisation

- Applies Infrastructure as Code (IaC) principles to maintain consistency and reproducibility in cloud infrastructure.
- Develops and maintains a reliable and scalable cloud-based infrastructure service to support continuous and secure delivery of software solutions that meet the evolving needs of key stakeholders across the University.
- Contributes to the identification, evaluation and adoption of tools, technique and processes (including automation and continuous integration) used to create a robust and cost-effective cloud-based platform.
- Builds and manages continuous integration and delivery (CI/CD) pipelines for large and complex pieces of work, enabling efficient software development workflows, automated testing and seamless production deployments.
- Takes technical responsibility across all stages and iterations of the IaC delivery process and serves as a technical SME within the team.
- Monitors system performance to analyse performance, security, and reliability. Measures and monitors the observability of cloud services. Makes recommendations and implements solutions to improve the platform service.

Platform design and development

- Adopts an agile mindset to delivery around a Scrum framework using adaptive (iterative/agile) approaches.
- Supports architecture and design decisions by providing technical expertise, ensuring alignment with strategic objectives and facilitating informed decision-making across the team.
- Collaborates with senior colleagues to review and revise cost optimisation in terms of FinOps to help derive best design decisions.
- Works with project managers to understand IaC requirements, provides expert knowledge on platform configuration, set up and connectivity. Serves as a guide to project staff in using cloud environments in the most efficient manner.
- Designs reuseable IaC modular components following agreed architectures, design standards, patterns and frameworks. Identifies and evaluates alternative design options and trade-offs.
- Contributes to development of architecture design policies and standards and selection of architecture components.
- Maintains and optimises infrastructure through regular updates and security patches, ensuring compliance with security best practices and long-term sustainability.

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IT Services responsibilities, accountabilities and duties

- You will be expected to demonstrate a commitment to the IT Services Practice Charter and the University's values. The University of Manchester values a diverse workforce and welcomes applications from all sections of the community.
- You may from time to time be required to undertake other duties of a similar nature as reasonably required by your line manager.

Person specification

Experience/education/qualification background:	• Expertise in cloud technologies and on-premises infrastructure, with practical experience in managing and deploying solutions in AWS or Azure environments. • Extensive knowledge of platform engineering, DevOps, cloud engineering, site reliability engineering, quality engineering, as well as Agile delivery methodologies. • Solid programming skills in scripting and automation languages, such as PowerShell, bash, or Python, for automating operational tasks and system configurations. • • Strong knowledge of Terraform, Azure and AWS. • Strong interpersonal and communication skills to effectively engage and collaborate with both technical and non-technical team members, ensuring clarity and understanding across all collaborators. • Ability to learn and adapt in ambiguous environments, with a proven capacity to navigate evolving challenges and continuously develop new skills as technologies and requirements change is an advantage. • Proven experience in high-intensity environments, demonstrating the ability to meet tight deadlines, manage technical debt, and deliver reliable solutions under pressure.

	Desirable qualifications: Agile qualifications (e.g. Scrum Master, Agile PM etc.), relevant Azure or AWS and Terraform certifications.

Key competencies	Level	Essential	Desirable
Infrastructure As Code (IaC): A descriptive model to define and deploy repeatable, scalable and secure infrastructure, such as networks, virtual machines, load balancers, and connection topologies. To use IaC as a key for DevOps practice and a component of continuous delivery.	Expert in	X	
DevOps: The collaborative approach consisting of agile practices, processes, and procedures designed to facilitate rapid IT service and product delivery. DevOps emphasizes people (and culture) and seeks to improve collaboration between development (Dev) and operations (Ops) teams with the aim of shortening the systems development life cycle to provide continuous release of high-quality software.	Expert in	X	
Infrastructure/system security: The security threats and vulnerabilities that impact and/or emanate from system hardware, software and other infrastructure components, and relevant strategies, controls and activities to prevent, mitigate, detect and resolve security incidents affecting system hardware, software and other infrastructure components.	Expert in	X	
Infrastructure architecture: The frameworks, principles and design patterns on which networks, resources are based on the cloud platform.	Proficient in	X	
Agile: A collection of methods, practices, tools and techniques, underpinned by the Agile Manifesto, that enable teams to develop products and services iteratively and deliver them in increments. An agile culture typically features iterations/sprints, daily stand-ups, show and tells, and retrospectives, and the deployment of techniques such as product backlogs,	Proficient in	X	

MoSCoW/WSJF prioritisation and A/B testing.			
Service delivery economics: The economics of service delivery, such as the cost per service line in terms of hardware, software and manpower used to deliver the service.	Familiar with	X	