

# HEAD OF PLATFORM ENGINEERING

Candidate pack

**UC/\S** 



### AN INTRODUCTION TO UCAS

As a highly trusted, independent charity, UCAS helps over 700,000 people from more than 200 countries and territories to explore the opportunities and benefits of undergraduate higher education (HE) every year. We are proud to enable over half a million people to change their lives by embarking on their studies at a UK university or college. You can read our strategy for 2020-2025 'Discover your future' **here**. Our digital capability and customer service expertise also mean that we can support individuals interested in exploring postgraduate courses, as well as degree and higher apprenticeships, and we currently run admissions services for conservatoires, postgraduate courses, and teacher training.

UCAS has a turnover of circa £50m. About 40% of that revenue comes from income generated from commercial activity through subsidiaries – all of which is gift aided back into the charity. The charity generates the remaining 60% of income through the application fees paid by individuals, and a fee paid by universities and colleges for students placed.

The Digital and Data team defines and delivers the digital products and services used by students, providers, advisers, and commercial partners, as well as the underlying technology platforms that enable these products to be developed in a responsive and agile way. Our new digital strategy, 'Connected and flexible admissions services for the digital age', sets out our intention for UCAS to be a customer centric, product-focused digital business, able to use data and digital technologies to connect students with their next opportunity, and to connect providers of further and higher education with individuals with whom they can build lasting, empowering possibilities. You can read about our digital strategy in more detail **here**.

### THE OPPORTUNITY

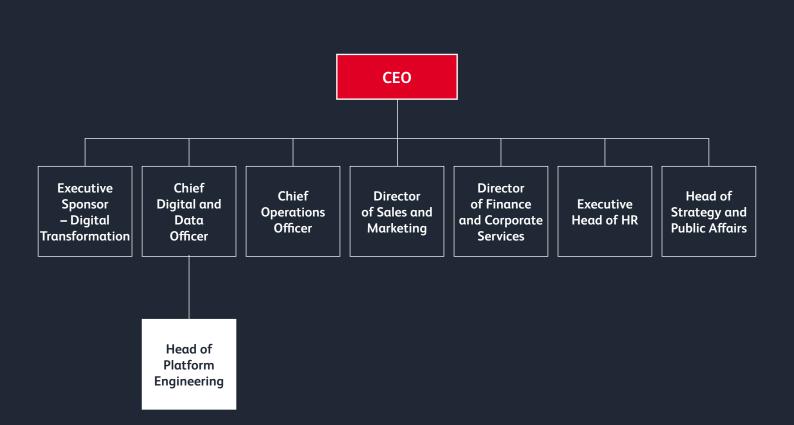
UCAS is on a fast paced, digital development trajectory having just launched its new digital strategy to 2025. We are seeking an innovative, driven Head of Platform Engineering to join our Digital and Data team, who has the experience, knowledge and skills needed to define and build a modern, consistent and automated cloud platform. As Head of Platform Engineering you will be responsible for the end-to-end health of the cloud infrastructure and platform built to power UCAS products and services.

Working closely with the wider Digital and Data team, you will drive automation to accelerate product delivery and ensure consistent and stable services. You will ensure that the technologies employed across environments including security, DevOps, and data engineering are correctly operated through a mixture of in-house and third party teams and services, to provide a resilient, secure, and highly available platform for our products and services to run on, and that the overall strategy for platform delivery is defined, approved, and implemented.





# **EXECUTIVE TEAM STRUCTURE**



### **KEY ACCOUNTABILITIES**

- To establish, deliver, and refine a platform engineering roadmap to ensure that all platforms and products remain current, deliver value to product engineering teams, and supports the needs of internal stakeholders in terms of scalability, resilience, security, capacity, and operational maintenance.
- > Define a technology roadmap that includes deliverables focused on the continued improvement of the supported solutions and empowering a DevOps culture through the use of automated platform capabilities underpinning customer-focused product engineering and development.
- Create tools and automated workflow capabilities to enable our software engineers to test and promote code across the different environments and into production with maximum velocity.
- > In collaboration with Product Engineering, and colleagues in Service Management and Operations, work to reduce or eliminate manual or repetitive tasks, improving the end-to-end health and performance of the underlying platforms.
- Anticipate product features by tracking dependent product strategies and roadmaps, eliciting stakeholder input, monitoring industry advancements, and collecting business needs.
- > To ensure that the infrastructure is developed in a manner that supports delivery of services to multiple platforms with appropriate levels of resilience and performance.
- > To ensure that UCAS has a common, consistent, and flexible platform that continuously delivers the tools, interfaces, and components that drive our products and services.
- > Inform the development of the overall solutions architecture for UCAS, ensuring that our underlying platforms are designed and engineered to facilitate and empower innovative product development and promoting automation, reuse, and consistency across the technology estate.
- > To ensure the various systems built on the platform by the business are coherent, and to actively identify and deliver common elements.





- Provide technology platform expertise across the company as required, to support management teams and general development activities in building complex, dynamic products and services.
- > Build an effective cloud formation function to leverage infrastructure as code, and enforce standards across the platform estate.
- > Develop and build a well-documented and centralised API estate, promoting reuse, and supporting API versioning and end-to-end lifecycle management.
- > Oversee the design and build of platform services with appropriate levels of security, ensuring that they are secure by design. Respond swiftly to new and emerging security threats and vulnerabilities.
- > Define and implement policies to manage the platforms securely, including identity and access management, patching, and disaster recovery.
- > Manage the use of data across platforms, ensuring that robust data engineering promotes and provides data to the right platforms at the right time for operational and analytical uses.
- > Working with Product Engineering, Architecture, and Operations Teams to provide an in-depth evaluation of evolving and mature technologies, help shape the customer technology roadmap, and facilitate the delivery of the business strategy.
- > Participate in and play a critical role in UCAS' technology leadership team, helping to drive company strategy at business scale.
- > To keep abreast of technical developments of operational importance to the company, identify best practice technologies to the business, participate in developing or setting standards and to assist with improving the standard of technical delivery and competencies within the technical teams.
- > Line manage a team of engineers to deliver the platform technical roadmap, creating a set of key measures to assure quality and control of engineering capability and performance. Create a line of sight to corporate aims and objectives, ensuring that staff are clear on their purpose and deliverables.
- > Build morale and motivation to bring out the best in your people, enabling them to do the best work of their lives, while building and retaining critical skills and potential.
- > As a senior manager, live and uphold the UCAS values. Champion diversity and inclusion to create a culture of innovation and high-performance.
- > Line management and departmental accountability of reports including systems engineers, and environmental and security teams.
- > Matrix management of other resources allocated or seconded to product engineering.
- > May execute contracts on behalf of UCAS to a value (exclusive of VAT) per contract per the company financial year of up to £75,000.00.

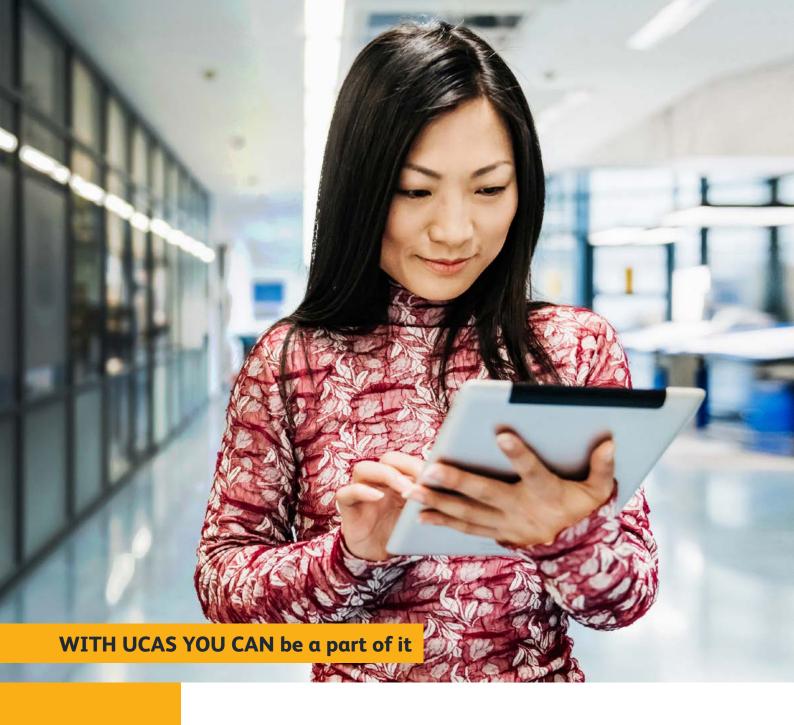
### PERSON SPECIFICATION

- > Extensive experience and technical engineering knowledge of a broad range of platforms and web-based/cloud formation and distribution, stretching across platforms, consumer products, emerging technology standards, and trends, including defining platform roadmaps and long-term strategic plans. Amazon Web Services (EC2, Elastic Beanstalk, S3, Aurora, Redshift) is essential.
- > Extensive experience of running platforms within a DevOps organisation delivering DevOps tool chain and automation are essential.
- > Strong and demonstrable experience of developing a CI/CD pipeline and supporting technologies.
- > Proven experience of API platform management. MuleSoft (including Anypoint) is desirable.
- > Proven experience in managing and developing a CRM platform. Salesforce is desirable.
- > Strong and demonstrable experience of managing platform security and emerging security threats and vulnerabilities.
- > Can clearly articulate data engineering concepts, and is able to demonstrate these through a deep level of experience and knowledge.
- > Has demonstrable in-depth knowledge and first-hand experience with modern complex development tool chains, bug tracking systems, continuous integration, and version control systems in both commercial and open source/agile settings.
- > Strong and demonstrable software development and release engineering skills. The ability to do so in distributed environments, and/or environments without direct line management or without intense face-to-face contact is valuable.
- > Track record of specifying, developing, and delivering software applications in a range of standards and languages.
- > Demonstrable knowledge of existing and emerging technologies, and their potential to enhance the performance and strength of the internet infrastructure.





- > Has substantial experience and expertise in agile delivery techniques and methodologies (SAFe) to ensure continuous improvement and delivery of UCAS products and services.
- > Ability to make technical decisions by staying stay abreast of advancements in related technologies.
- > A deep technical knowledge in software and systems able to dive into details with engineers, and distil to high level for executives, customers, and non-technical audience, valuing diversity of thought and finding consensus.
- > Ability to cope in a technically complex and fast-changing environment, and to respond calmly and rationally to changing aspirations in a deadline-driven situation.
- > Strong planning and organisational skills, including the ability to manage several work streams simultaneously, while balancing business priorities and quality.
- > Excellent communication skills with a capacity to present, discuss, and explain issues coherently and logically, both in writing and verbally.
- > Influential and persuasive, with the ability to enthuse and inspire multidisciplinary teams, and build successful relationships at all levels including Executive and Board.
- > Ability to balance conflicting and changing demands through prioritisation and a pragmatic approach.
- > Substantial experience in people leadership and management, including the ability to manage/ matrix manage multiple scrum teams across multiple technologies.
- > Advanced knowledge of leadership concepts, practices, and techniques especially change management and leading culture change.
- > The ability to scale resources, skills, and work with an offshore technology partner to balance onshore-offshore capability.



## TERMS OF APPOINTMENT

**Location**: Cheltenham, but flexible working

**Salary**: Salary: A competitive salary, commensurate with the scope and complexity of the role, will be negotiated with the successful candidate. A benefits package will include annual leave of 30 days per year, generous employer pension contribution, free parking, on-site nursery, enhanced family leave for new parents, and use of our subsidised, gym and restaurant.

**Terms**: Full-time, permanent. UCAS is committed to hiring the best possible talent, irrespective of background or needs. Many of our staff work in many different ways, please talk to us at interview about any flexibility requirements or reasonable adjustments you may have.

# **HOW TO APPLY**

Apply on our website **here**.

You will receive an email confirming that your application has reached us. We endeavour to contact all candidates before or soon after the closing date.

The closing date for this role is 13 September 2020

Interviews will be held on 23 September 2020

If you would like to discuss the role or terms further, please contact Hayley Histed our internal recruiter, at **h.histed@ucas.ac.uk** 

