

Algorithmic Enterprise Architect

Basic information

Band: B

Job family: Technology

Location: Cheltenham

Reports to: Enterprise Architect

Team: Enterprise Architecture

Business unit: Technology



Role purpose:

UCAS is undertaking a major transformation programme that will provide the capabilities and services to support UCAS' Corporate Strategy up until 2020.

Data is at the heart of UCAS. It allows us to operate our admissions processes, but it also powers a whole number of other activities related to providing marketing services for education providers, support for schools and learners, and data products and services for the sector and commercial clients.

As part of this transformation, UCAS wants to become an organisation that uses intelligence and algorithms to drive its strategic thinking and day-to-day activities – including machine learning and other automated decision-making capabilities.

The purpose of the role is to be the driving force behind identifying and exploiting opportunities to make the most of these technologies, and to take the lead in the specification, design, and implementation of solutions.

Key duties and responsibilities:

- The translation of the enterprise plans for algorithmic decision-making into solution architectures that address UCAS' needs and aspirations.

- Horizon scanning for algorithmic trends relating to technology, and promoting new and innovative ways to improve the organisation.
- Work with a wide variety of people including sponsors, other architects, strategic product managers, product owners, and technical experts to define and sell the benefits of the solution architectures.
- Creation of solution architecture collateral and presentation at Architecture Review Board for review and approval.
- Ensure what's being developed aligns with the approved solution architecture, and provide an early view on levels of alignment.
- Proactively anticipate potential opportunities and issues that may arise, and act to mitigate them.

Accountabilities:

- Definition of solution architectures that align with the overall Technology Strategy.
- Producing work to defined timescales and quality.
- Alignment of solutions with IT strategy and principles.

Person specification:

- Able to rapidly assimilate new situations and evolving organisational dynamics.
- Subject matter expertise in machine learning tools and technologies.
- Subject matter expertise in analytics, including technologies and platforms such as AWS product set and similar products from other suppliers.
- Experience of designing and deploying solutions in the cloud.
- Experience in working with tools such as SAS, Tableau, Alteryx, SAP BI, or equivalents.
- Experience in working with R or Python a plus.
- Particular expertise in the technical integration between data science tools and corporate data warehouses and data lakes.
- Experience of using these technologies to deliver solutions that provide capabilities associated with big data, data lakes, data warehouse, data science, algorithmic platforms, machine learning, etc.
- Experience of working with other architects at both and enterprise and solution level.
- Authoritative and collaborative manner – able to explain architectures to a wide variety of stakeholders with awareness of their motivations and interests.
- Astute and aware of organisational, team, and individual motivations.
- Able to adapt various ways of working and approaches according to need.
- Strong experience of working as an architect in agile development.

This role profile sets out the scope and main duties of the post at the date when it was drawn up. Such details may vary from time to time without changing the general character of the post or the level of responsibility entailed. Such variations are a common occurrence and cannot of themselves justify a reconsideration of the level of the post. All UCAS employees are expected to be flexible in undertaking the duties and responsibilities attached to their role and may be asked to perform other duties, which reasonably correspond to the general character of their role and their level of responsibility.

Our values in action

Customer – We always look through the customer lens. The logic of the customer is the logic of UCAS.

Commitment – When we commit, we deliver on time, quality, and budget, or we negotiate changed commitments for good reason. We never leave commitments uncovered.

Team – We work collaboratively. When we commit, we commit as an individual and as a team. We strive for and support team success as well as individual success.

Outcomes – We plan and do things to achieve outcomes. We define them, aspire to them, and deliver them.

Agility – We know we need to be agile when we look through the customer lens, when we make commitments, when we work in teams, and strive for the right outcomes.

Extraordinary – We are ambitious for our customers, for UCAS, and for our teams. We want more than ordinary outcomes – we strive to achieve extraordinary outcomes, extraordinary customer focus, and an extraordinary culture of high performance and quality of focus.