Lead Data Scientist

Basic information

Band: Band C/D (dependent on experience)
Job family: Analysis and Insight
Terms: Permanent
Location: Cheltenham

Reports to: Head of Analytical Development
Team: Analytical Development Team
Business unit: Analysis and Insight

Role purpose:

UCAS is the UK's centralised higher education admissions service. We track choices and decisions across millions of applications for higher education – half of all young people pass through our systems. This generates big, deep, and rich operational data. Buried in this data are key insights and understanding about going to university.

The Analysis and Insight business unit remit includes:
- sharing higher education insights and trends with key internal and external stakeholders
- maintaining a suite of commercially available data products
- delivering additional value to UCAS and UCAS Media through new data-driven product development

The Analytical Development Team is responsible for the development of data science models that form the core of commercially available data products, deliver insights for key stakeholders, and support business decisions, to drive operational efficiencies.

Key duties and responsibilities:

- Lead and manage significant and complex areas of strategic activity within the team.
- Lead the development of a forecasting capability.
- Be responsible for the delivery of commercially viable data products built on forecasting models.
- Lead the development of a predictive modelling and machine learning capability.

- Be responsible for the delivery of commercially viable data products built on predictive models, and machine learning.
- Lead on the strategy for exploiting predictive analytics and machine learning to deliver commercially viable data products and operational efficiencies for UCAS.
- Be responsible for the agile delivery of business outcomes aligned with the UCAS Media growth strategy, and continuous improvement in the way data products are delivered and deployed.
- Work collaboratively with stakeholders across UCAS to develop and deploy data products that deliver customer and UCAS outcomes.
- Contribute as a senior professional to the standing and development of the Analysis and Insights Team.
- Create and manage multiple cells of work which are innovative, well-articulated, timely, and fully exploit the potential of UCAS' data and systems.
- Lead and manage the team of lead data scientists and/or data scientists to achieve section outcomes, and develop their skills as innovative technical creators, for present and future value to the business.
- Realise value for UCAS more widely by bringing analytically informed perspectives and abilities to discussions across the business, and at external engagements.
- Act as a role model for the unit and organisation, upholding Analysis and Insight's culture and standards, and demonstrating the UCAS values.

Accountabilities:

- Leadership and management accountabilities and authorities for a team of data scientists.
- Authorisation to represent the Analysis and Insights at internal and external meetings where required.
- Authorisation to deputise for senior management at internal and external engagements.

Person specification:

- Experience in developing and leading a substantive area of work and/or line management of a team.
- Advanced analytical programming expertise commensurate with a senior technical professional across analysis methods, data creation, data linking, and analytical reporting
- Strong professional judgement in choosing analysis pathways that give rapid, high quality, actionable results.
- Leadership and management methods to achieve section outcomes, and develop the skills capability in the section.
- Effective communication skills, to embed results across the unit, and articulate how data and analysis creates value for our customers to the rest of UCAS.

Essential skills:

- Extensive knowledge of at least one analytical programming language, such as SAS, R, or Python.

- Outcome-focused, results driven, with strong attention to detail, execution, follow-up, and focus on quality.
- Strong team player.
- Effective communication skills.
- Bachelor's or higher-level degree in a numerate discipline, such as mathematics, statistics, computer science, economics, or the natural sciences.

Desirable:

- Proven experience building, implementing, and maintaining data science models in a commercial environment.
- Proven experience of creating innovative analytics products that translate the outputs of data science models into insights and actionable advice.
- At least five years' experience of a wide range of statistical and modelling techniques
- Three years' experience in a lead role, developing inexperienced team members.
- Experience of engaging and working with a range of technical and non-technical stakeholders across the business at range of seniority levels.
- Experience leading an agile team.

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-focused – We understand what our customers want, and we act on their changing needs.

Collaborative – We collectively create an engaging and positive work environment.

Accountable – We take ownership of our individual and organisational performance.

Service excellence – We realise, grow, and maximise our potential.

Trusted – Individuals are trusted to make informed decisions and take appropriate risks.