

Role Definition

Job Title: Data Scientist (ARD)

Reporting to: Head of Applied Research and Development

The Applied Research + Development team produces cutting-edge technologies, including web applications, to support Architecture, Engineering, Construction and Operations for the built environment. We take these technologies through all stages of the innovation lifecycle, from R+D prototypes through to robust production applications. We are looking for data scientists with an interest in spatial, interactive and visual design to support this mission and deliver industry-leading solutions.

In this position you will be a member of the Applied R+D team, collaborating and working with an array of different groups within the company, from the Material Research Centre to the Business Intelligence and Development team. Your involvement will include strategic R&D to better connect teams and datasets within the office and enable cross-fertilisation across specialist groups. Additionally, the role will require collecting and organising structured and unstructured data and identifying pipelines to streamline the data collection process. The role also involves identifying opportunities in data capture and digitisation across the practice, implementing digital solutions, as well as building predictive models and contributing to machine learning initiatives.

Data Scientists will work in teams alongside software developers as well as domain specialists like material scientists and business analysts. They produce data strategies that work across the practice.

Responsibilities

- Provide advisory support to different teams regarding data intelligence and insight-driven development.
- Work with domain experts across the company to translate their business problems into productive data models and processes.
- Train these domain experts in the basics of data analytics.
- Explain and defend analytical techniques and visualizations of relevant metrics to key stakeholders
- Create trend reports that track the impact and effectiveness of processes and solutions over time.
- Drive conversations and aid in executive decision-making regarding federated governance and other data policies that need to be in place.
- Build processes and workflows to support data transformation, metadata extraction and dependency management.
- Build, maintain and deploy statistical models while monitoring their use and performance on a regular basis.

Qualities and Skills required

Essential

- Degree in data science, statistics, machine learning, computer science or equivalent experience.
- Understand the principles of computer science algorithms and data structures.

- Capable of developing pipelines for data extraction, collection, interrogation, and management.
- Experience in identifying the potential of data in driving new solutions towards effective decision-making.
- Experience in enabling teams and advocating for cross-organizational data policies.
- Knowledge of statistical and machine learning techniques that can deliver data-driven solutions.
- Experience working with and setting up modern data architectures (i.e Data Fabric/Mesh/Lake).
- Deep understanding of common data formats, and strong ability to transform raw data into useful data systems.
- Capable of uncovering trends in different datasets.
- Knowledge of DataOps and MLOps concepts and tools.
- Strong programming skills, with a preference for (but not limited to) Python, Julia, Matlab or R.
- Experience designing and working with relational databases as well as working familiarity with other types of relevant databases.
- Effective communication skills, with the ability to deliver compelling presentations on how data insights can help the business.
- Effective listening skills in order to understand the requirements of the business.
- Able to manage sensitive and confidential information
- A keen eye for detail.
- Good problem-solving skills
- Excellent verbal and written communication skills
- Good interpersonal skills

Desirable

- A track record of using data to solve complex problems.
- Experience working with cloud computing.
- Familiarity with operational aspects of data management (e.g. building and maintaining data lakes).
- Experience with ethical, legal and compliance aspects of data management.
- Knowledge of HTML, JavaScript and CSS.
- Knowledge of ASP.NET, C#, .NET core and SQL Server.