

# Jack Royal

Consultant  
Profile

Jack is a skilled Data Engineer with an eye for detail and a passion for analytical and evidence-based thinking. Jack has great experience working on several solutions for public and private sector clients utilising a number of technologies including Apache Spark (PySpark), Python, R, SQL, Power BI, and various aspects of the Azure tech stack.

Jack is a fantastic communicator and demonstrates high-level interpersonal skills and excellence to solve complex problems. He is often praised for his effective communication with all stakeholders and his ability to provide clarity on technical aspects of a project that can be easily understood by non-technical stakeholders.

## Key Skills & Technologies

- Azure
- Data Engineering
- Data Modeling
- Data Analytics
- Data Migration
- Data Integration
- Data Science
- Data Dashboards
- Database Development
- Data Structures
- Data Visualisations
- Web Development
- Financial Reporting
- R
- Python
- SQL
- Databricks
- Data Factory
- Microsoft Power BI
- Apache Spark
- Microsoft Excel
- Git
- Power Query,
- Powershell
- CSS
- HTML.

# Consultant Profile

## Selected Project Experience

### Big 4 Consulting Firm (NZ) – Data Engineer

- Implemented a variety of data and analytics-focused solutions for several public and private sector clients. Solutions utilised a number of technologies including Apache Spark (PySpark), Python, R, SQL & Power BI.
- Led the design and building of a data pipeline & dashboard for a large public sector client and automated a manual cleaning task which previously took multiple months to perform. Data was ingested from ADLS Gen 2, cleaned and transformed using PySpark within Azure Databricks and visualised on a static website hosting a public Power BI dashboard. The work completed on this engagement led to a six-figure multi-year extension.
- Utilised Azure Data Factory to create additional data flows and pipelines for a public sector client. Data was ingested from ADLS with orchestration and transformations being handled by Azure Data Factory. The solution was deployed into the clients production environment using ARM templates and Powershell scripts.
- Led the design and development of a financial reporting dashboard in Power BI for a leading agricultural industry association.
- Developed additional functionality for a model assuring one of New Zealand's largest state-owned enterprises. The model provided assurance over several financial calculations and classifications
- Developed a big data pipeline assuring calculations and data processing done by one of New Zealand's largest state-owned enterprises. The data pipeline ingests parquet files from ADLS Gen 2 and processes billions of rows of data utilizing PySpark and Azure Databricks.
- Worked with IAC tools such as Pulumi alongside scripting technologies such as Powershell to deploy cloud infrastructure within Azure.

### Leading NZ Based Data Science Organisation – Developer

- Provided a number of advanced data science-based solutions for clients both in the public and private sector.
- Worked on a variety of projects gaining a wide range of domain knowledge and skills
- Web development using Python within the Django framework
- Completed a variety of projects contributing to significant improvement of the internal workings of the organisation.



## Industry Experience

- Information Technology
- Big 4 Consulting Firm
- Financial Services
- Retail
- Agriculture

## Certification

Microsoft Certified | Azure Fundamentals

LinkedIn Learning | Advanced SQL for Data Scientists

Bachelor - Science, Computer Science | University of Otago, New Zealand

Bachelor – Applied Science, Data & Information Science | University of Otago, New Zealand

