

# Alex John Bush

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EMPLOYMENT HISTORY

## Professional Services, Qrious Limited (NZ)

From November 2022 to now

### Principal Consultant

## Digital Lighthouse, KPMG New Zealand (NZ)

From August 2019 to November 2022

Data and Analytics consultant leading and delivering projects for public and private sector clients. Drove internal innovation for tools and platforms to increase our delivery capability and technical maturity. Invested heavily in mentoring of team members, fostering a culture of learning and collaboration.

### Associate Director

From to November 2022

Chapter Lead for Engineering. Led and oversaw business development and engagement delivery, and identified and delivered strategic investments in technology and mentoring to ensure delivery capability and capacity. Managed relationships with senior client stakeholders to ensure effective delivery of complex engagements.

### Senior Manager

From April 2021 to March 2022

Solution design and delivery of end-to-end analytics platforms for public-sector clients. Designed and delivered zero-trust platform architectures of PaaS and IaaS infrastructure. Developed large-scale data processing pipelines in Apache Spark to support client data modelling.

### Manager

From August 2019 to March 2021

Led client project delivery, from Azure Cloud architecture and infrastructure automation, to back-end application development and data reporting. Increased the technical maturity of the team, running workshops and designing best practices for delivery on topics such as Git, advanced SQL, Apache Spark, testing and automation, cloud architecture.

## Cox Automotive (UK)

From November 2016 to August 2019

Data Engineering team lead, supporting Business Intelligence (BI) and Data Science (DS) teams with data and platforms to enable effective business analytics. Enabled principle of self-service analytics and ETL development for BI and DS teams through strategic use of tool and framework development, workshop and collaboration sessions, and interactive consultation (summarised in a talk given at the Spark Summit 2019 ([youtu.be/1WUIua-xjJA](https://youtu.be/1WUIua-xjJA))).

### Lead Data Engineer

From April 2018 to August 2019

Delivered and supported data-driven platforms, pipelines, and products, and enabled BI and DS teams by productionising data and machine-learning models. Performed zero-downtime platform migration from Cloudera (IaaS) to Azure Databricks (PaaS). Released and was a core contributor to Waimak, our open-source Apache Spark library ([github.com/CoxAutomotiveDataSolutions/waimak](https://github.com/CoxAutomotiveDataSolutions/waimak)).

### Hadoop DevOps Engineer

From **November 2016** to **March 2018**  
Automated deployment of Cloudera platform, and migrated platform onto a secure platform (Kerberos, SSL, RBAC). Responsible for all automation of project and environment builds and deployment.

## Hortonworks (UK)

From **December 2015** to **November 2016**

Professional services consultant providing Hadoop implementation, administration and developer services to banking-sector clients.

**Senior Consultant**

## British Gas (UK)

From **September 2013** to **November 2015**

Developer and Platform Engineer delivering ETL pipeline development, and infrastructure and platform automation to support large on-premises Hadoop clusters.

**Hadoop Platform Engineer**

From **January 2015** to **November 2015**

**Graduate Hadoop Software Developer**

From **May 2014** to **January 2015**

**Graduate SAP Developer**

From **September 2013** to **May 2014**

### EDUCATION

## MPhys, Masters in Computational Physics with Honors

University of Edinburgh

Masters Project: Radiative Transfer on GPUs using NVIDIA CUDA

Senior Honors Project: Lattice QCD on GPUs using NVIDIA CUDA

### CERTIFICATIONS

#### Microsoft Certified: Azure Solutions Architect Expert

Microsoft

Valid from **February 2022** to **February 2023**

#### Microsoft Certified: Azure Data Engineer Associate

Microsoft

Valid from **April 2020** to **April 2023**

#### Microsoft Certified: Azure Developer Associate

Microsoft

Valid from **February 2022** to **February 2023**

#### Microsoft Certified: Azure Cosmos DB Developer Specialty

Microsoft

Valid from **June 2022** to **June 2023**

#### Microsoft Certified: DevOps Engineer Expert

Microsoft

Valid from **January 2022** to **January 2023**

#### Microsoft Certified: Azure Security Engineer Associate

Microsoft

Valid from **September 2020** to **September 2023**

#### Microsoft Certified: Azure Administrator Associate

Microsoft

Valid from **January 2022** to **January 2023**

#### AWS Certified Big Data - Specialty

Amazon Web Services (AWS)

Valid from **January 2020** to **January 2023**

**Data Engineering**

Apache Spark, SQL, Hive, and  
Databricks

**Cloud Engineering**

Azure and AWS

**Infrastructure / Platform**

Linux / Unix, SSL / Certificates, and  
Networking

**Software Engineering**

Scala, Python, C#, TypeScript, and  
Functional Programming

**DevOps / Automation**

Azure DevOps, Azure Pipelines, ARM /  
Bicep, Bash, Github, Github Actions,  
and Pulumi