



**Name** Luke Archer

**Role** Chief Data Scientist

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## Profile

- Luke is a Data Scientist with 8+ years of experience in machine learning, Functional programming, AI, MapReduce and statistical modelling
- Additional 8 years of experience as data / business analyst
- Analytical skills including using Machine Learning (Decision Trees, Random Forests, Boosting, Clustering, PCA), Artificial intelligence (Artificial Neural Networks, Deep Learning, Autoencoders) and statistical analysis including advanced techniques and approaches (Graph and Text (NLP and Sentiment) analysis)
- Member of Institute of Analytics Professionals of Australia (IAPA), Data Science Melbourne, Melbourne R Users Group, International Institute of Business Analysis (IIBA – Volunteer)

## Skills and Competencies

- Programming Languages including Python, R, Scala, Julia, SAS, SQL, C#, VBA, Javascript
- Database Technologies including Azure, Databricks, Hadoop, Spark, AWS, Teradata, Oracle, SQL Server
- BI tools including Azure, Tableau, MSOffice, PowerBI, Alteryx
- Specialist tools and technologies including Splunk, QGIS, Docker etc.

## Education/Certification

- Bachelor of Applied Science (Applied Chemistry) – Royal Melbourne Institute of Technology

## Selected Professional Experience

### **AI/Data Science Practice Lead – Capgemini (Toyota) – 05/2020 – 04/2022**

Luke led the Data Science Practice at Toyota Advanced Analytics (Insights and Data) on behalf of Capgemini and has designed and constructed models for a number of key strategic initiatives including:

- Customer Propensity to Purchase (upsell) Model
- Customer Loyalty Scoring Model
- Models predicting when customers' vehicles are due for servicing
- Models to grow the Toyota Used Vehicle Market Share
- A model to identify potentially obsolescent parts and accessories
- Leading the Citizen Data Scientist Group
- Design of Data Science Consulting Practices

### **Senior Data Scientist – Velrada, 04/2019 – 04/2020**

As a Senior Data Scientist at Velrada, Luke's primary engagement was on IP and solution design and subsequent development of these solutions for a range of clients and domains. Luke utilised cloud based technologies (Azure Databricks and Spark) to develop a number solutions including:

- A Speech to Text sentiment analysis process for the health care industry
- A QAQC process for wet chemistry analysis and modelling for the mining industry
- A Trigger based process to assist waste management and logistics for the mining industry.

### **Data Scientist – Cloud9 Consulting (Unisuper), 04/2018 – 04/2019**

Luke developed models that provided an early detection and prevention capability for financial crime incidents, resulting in \$7m prevention of potential loss

### **Data Scientist – National Broadband Network, 10/2017 – 04/2018**

Luke was a member of the Chief Data Office, with notable projects and achievements including design and construction of Copper Network Speed Models, data forensics (e.g. leakage), detection of network faults and in-home wiring as well as ad-hoc analyses and reporting...

### **Data Scientist – Telstra Corporation Limited, 07/2014 – 05/2017**

Luke was the primary Data Scientist for the Telstra Prepaid Portfolio (~9m customers) as part of the Chief Marketing Office. Notable projects and achievements included design & construction of Churn Models, Revenue Uplift Models, CRM Analytics, NPS Analytics and many more...



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