

Career summary

Data Scientist (Machine Learning)	2020 – Present	Contract: Financial Institutions
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- Research and develop machine learning models for a range of business functions.
 - Global macroeconomic trends and forecasts.
 - Algorithmic strategy monitoring and rebalancing.
 - Anomaly detection in live-streaming trade data (Big Data).
 - Regulator reporting and reconciliation.
- Expertise in many areas of data science.
 - Statistical and data analysis + data visualization.
 - Distributed computing with PySpark.
 - Cloud computing with Google Cloud, Azure, and AWS.
 - Classical ML - linear models, PCA, SVM, K-Means, Random Forest and XGBoost.
 - Deep learning - DNN, CNN, LSTM and GANs.
 - Reinforcement learning - DDQN, PPO and A2C.
- Professional development - keep up to date with the latest academic research.

Skills	Libraries & Tools
Machine learning	TensorFlow, Keras, Pytorch
Data engineering	Pandas, Numpy, Scikit, PySpark
DevOps	Docker, GCP, Azure, AWS
Databases	SQL, Redis
API/Dashboard	Node.js, FastAPI, Streamlit

Programming Languages	Level
Python, JavaScript	Proficient
C++, SQL	Familiar

Data Scientist	2019 – 2020	Crypto Compare: Nasdaq Index Provider
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- Quantitative analyst, Python and NodeJS software developer.
- Designed and implemented Crypto Asset Indices (NASDAQ) which aggregates live streaming prices from over 300 exchanges across 1000 cryptocurrency pairs on a tick-by-tick basis and are real-time market cap weighted.

Quantitative Developer	2018 – 2019	GS Capital: CME Market Maker
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- Built an in-house high frequency cryptocurrency trading platform in Python that connected to a decentralised exchange network using FIX which handled newly developed cash arbitrage and futures stat-arb strategies and facilitated up to 200 trades a second, a 10x improvement from the previous system.
- Used machine learning to data analytics techniques to model large quantitative datasets.

Head of Technical Analysis	2015 – 2018	Continuum Economics: Financial Intelligence
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- Provided investment intelligence to some of the industry's largest financial institutions such as the Bank of England, European Central Bank, Citibank, Barclays, Nomura, Lloyds and Danske Bank.
- Managed the global technical research team consisting of 10 people across UK, US, and Singapore.

Trader, Quantitative Analyst	2013 – 2015	Forex Trading Floors: Proprietary Trading
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- Successfully ran an FX portfolio using statistical analysis and order flow analytics to guide trading decisions.

Olympic Athlete: Shooting	2006 – 2013	Great Britain Olympic Team
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- London 2012 Olympic Games.
- Quadruple medallist at 2010 Delhi Commonwealth Games.

Education

Course	Institution
Machine Learning / Computer Science	Stanford University (Online)
TensorFlow Developer Professional	Google
Reinforcement Learning Specialization	Alberta Machine Intelligence institute