

QUAN XUE

Associate Data Scientist III at GovTech

@ quan.xue@outlook.com

+65 9673 6560

in linkedin.com/in/quan-xue/

github.com/quan-xue

EDUCATION

Georgia Institute of Technology M.S. Analytics

08/2018 - 12/2019

- GPA 3.8/4.0
- Coursework: Algorithms, Data Mining, Deep Learning, Machine Learning, Optimization, Time-series Analysis.

London School of Economics BSc. Economics

09/2015 - 06/2018

- First class honors with top 5% average score.
- Won all expenses paid scholarship to Washington D.C. to present final year economics thesis.
- Coursework: Advanced Econometrics, Behavioral Economics, Finance, Macro and Micro Economics.

TECHNICAL SKILLS

Certifications AWS Certified Cloud Practitioner

AWS Solutions Architect Associate

Azure Fundamentals

Technology Airflow AWS Kubernetes

Spark

Programming R Python Scala SQL

Modelling Techniques CART Clustering

Neural net

PCA

Regression

Time-series analysis

AWARDS

Master Data Science Competition

- Identified key growth areas and drafted business plan for major auto parts company using clustering techniques.
- Runner-up out of 30 teams winning \$5000 cash prize (2019).

Collegiate Cup Hackathon

- Conceptualized state-wide strategy to improve technology access for under-served communities.
- Georgia State Champion in case category winning \$750 cash prize (2019).

INTERESTS

- Georgia Tech and LSE mentor advising juniors on career and course choices.

EXPERIENCE

Singapore Government Technology Agency (GovTech) Associate Data Scientist III, Tech Associate Programme

Dec 2020 - Present

Singapore

- Designed and implemented fraud detection platform using graph network, saving taxpayers SGD\$X MM annually
- Worked on demographics movement visualization and analytics application processing 60+ GB of daily data
- Developed algorithm for generating map layer overlays based on user requirements and data constraints
- Led engagement projects with other government agencies exploring urban planning and COVID management
- Initiated time-series based anomaly detection in data pipeline
- Runner-up in company hackathon for passport photo adjustment application applying deep learning for background removal

Bridgewater Associates

Investment Engineer

Feb 2020 - Sep 2020

Westport, CT

- Conceptualized and implemented tool to detect data dependencies within investment systems, achieving >50% time saving.
- Designed data reliability and timeliness tests to ensure investment signal accuracy.
- Applied time-series analysis for predicting gold demand

Chick-fil-A

Graduate Innovation Intern

Fall 2019

Atlanta, GA

- Spearheaded long-term development of an automated drive-thru voice ordering system applying natural language processing and AWS cloud technologies.
- Achieved >30% time saving and >40% improvement in customer engagement.

Pacific Investment Management Company (PIMCO)

Client Data Science Summer Analyst

Summer 2019

New York City, NY

- Modeled effects of macroeconomic factors on investment decisions to guide product strategy and revenue forecasting using time-series analysis (ARIMA, GARCH, VAR).
- Presented model viability to the CFO office and initiated long-term development of project.

Singapore Government Technology Agency (GovTech)

Data Science Intern

Summer 2018

Singapore

- Initiated and implemented Optical Character Recognition project for government media regulator identifying ISBNs from 10,000+ scanned documents using Tensorflow and Google Cloud.
- Accomplished >20x time saving (total of 4,000+ hours).