JESSE MOORE

📞 +1 403 903-5774   @ Jesse@jessemoore.ca
🔗 www.linkedin.com/in/jessemoore07   🔗 https://github.com/jes-moore
📍 Calgary, Alberta, Canada

EXPERIENCE

Head of Data Science
Avatar Securities, LLC
01/2020 - Present
Chicago (Remote)

Python, PyTorch, Scikit Learn, ML-Ops, ETL, AWS, MongoDB, SQL
Avatar Securities is a multi-strategy trading firm based in Manhattan with offices in Austin and Chicago

- Built and operated an event-based backtesting and trading engine that reduced time from ideation to deployment by 65%.
- Directly managed Avatar's quantitative trading infrastructure team - significantly improved Avatar's availability and reduced trading latency by 99%.
- Rebuilt the entire ETL pipeline for the quantitative database that housed all market data across supported assets - reducing downtime by 98% (once per week to once per year).
- Constructed a multi-staged natural language to quantitative formula translation engine that generates mathematical formulas from written descriptions with a success rate of 95%.

Quantitative Trader
Avatar Securities, LLC

- Created, built, and operate a set of trading strategies for the firm with a combined Sharpe ratio of 3.3.

Principal Consultant - Deep Learning
VoiceOps
01/2021 - 01/2020
USA Remote

Python, PyTorch, ML-Ops, Multi-GPU Training, AWS, MongoDB, SQL
VoiceOps is a coaching enablement platform that helps users turn data into measurable outcomes for teams on the phone.

- Responsible for architecting and constructing AWS-based infrastructure for large-scale machine learning. Developed scripts to train, fine-tune, and fully integrate transformers (e.g. BERT, ALBERT, Roberta) into novel new architectures that combined both text and statistical data.
- Constructed and deployed an ASR post-processing model that reduced transcription costs by 80% as measured in an A/B test using price per word transcribed.
- Automated scoring of transcriptions (ROC-AUC = 0.90) reducing the number of administrators by 50%.
- Developed a model to find optimal price to pay for a transcription - reducing transcription costs an additional 25%.
- Built a novel transformer/LSTM architecture to classify events in a phone call - unlocking sentence by sentence automated coaching in the platform.

Technical Founder
Mobilads
01/2019 - 05/2020
New York

Python, AWS, Data Engineering, Geospatial Data
Mobilads is Americas leading ride-share car advertisers and connects brands to consumers through smart out-of-home advertising.

- Drove the company to $5 million in annualized revenue through automation.
- Constructed and optimized a geospatial system that maps physical ad impressions based on vehicle GPS data and mobile GPS data. The Mobilads geospatial system was scalable to thousands of vehicles and billions of GPS points. This system was attributed to the 100% customer retention rate with major brands like Amazon, American Express and Mars Wrigley.
- Architected and led the development of the Mobilads app for autonomously managing tens of thousands of drivers, boosting the companies gross margins from 15% to 21% and helping the business scale from running 1 concurrent ad campaign to 10.

SKILLS

Leaderships and Management
Project Management ·
Organization and Team Building ·
Talent Development

Programming
Python · Docker · AWS · CI/CD ·
Operations · Devops ·
Custom Test Frameworks

Data Science
Machine Learning ·
Data Engineering · ML Operations ·
Pandas · Numpy · Numba

Deep Learning
Deep Learning Research ·
Applied Deep Learning · PyTorch ·
Large Language Models ·
Transformers

Trading
US Equities · Backtesting ·
Quantitative Trading ·
Automated Trading Execution ·
Slippage/Trading Cost Optimization

CERTIFICATION

Series 57 - Securities Trader Representative
Finra November 2021

EDUCATION

B.Sc. in Mechanical Engineering
University of Alberta
2007 - 2012

EXPERIENCE

CEO and Technical Founder
Sigmai

06/2017 - 01/2019

UK / Bulgaria

Python, PyTorch, AWS

Sigmai created an automated news classification engine utilized by hedge funds for trading decisions and by companies to monitor their brands across the globe

- Led the company to its acquisition by Commetric in 2018 - a company that continues to provide services to top global brands such as Novartis, Pfizer, Coca-Cola and Google.
- At the time of our acquisition, Sigmai's principal deep learning model - Sierra - had a 92% accuracy rate over more than 400 classifications and processed hundreds of thousands of news articles daily.

Data Scientist
Zalando

01/2016 - 06/2017

Hamburg, Germany

Python, Spark

Zalando SE is a publicly traded German online retailer.

- Built analytical tools and ETL pipelines in Spark on AWS and predictive tools for targeting audiences for specific ad campaigns that increase return on ad spend by 21%.
- Developed a system to detect and reduce lost revenue due to poor ad placement by an average of $US 0.5 million per month.
- Designed a system for determining the causal impact of multiple concurrent ad campaigns (Offsite, Onsite, Banner Ads, Full-Page Ads, etc) using regression and Bayesian time-series models.

Engineering Project Manager
Senex Energy

08/2012 - 11/2015

Brisbane, Australia

Senex is an established and growing Australian producer of oil and natural gas.

- Given the top performance ranking every year I was at the company due to repeated on-time and on-budget project delivery.
- Managed multi-disciplinary engineering projects totaling more than $100 million under strict budget and schedule constraints for upstream oil and gas exploration.
- Delivered projects accounting for 30% of annual company production in 2011.
- Reduced completion times by 40% for repeatable projects through automation and modularization.

Project Manager
ExxonMobil

04/2010 - 09/2011

Edmonton, Canada

ExxonMobil is one of the world's largest publicly traded oil and gas companies.

- Led capital expense projects totalling $5 million for the Integrated Event Team that planned refinery shutdowns.
- The original 4-month co-op contract was extended to 18 months due to high performance and company needs.
- Completed a high-risk project involving the replacement of catalyst beds in the hydro-treating reactor of the refinery on time and on budget.