Devminda L. Abeynayake

Urbana, IL
217-721-6463 • ada16@illinois.edu • www.linkedin.com/in/devminda-abeynayake
github.com/devminda

Professional Summary

M.S. in Financial Engineering student with professional experience developing high-throughput data pipelines and backtesting algorithmic trading strategies. Passionate about building innovative, low-latency systems and solving complex problems at the intersection of technology and trading. Seeking to apply strong object-oriented Python and C++ skills to a Quantitative Development Internship role.

Education

University of Illinois Urbana-Champaign — **Champaign, IL**
M.S. in Financial Engineering (Reading) — *Aug 2025–Present*

University of Colombo — **Sri Lanka**
B.S. (Hons) in Industrial Statistics (GPA: 3.79/4.3) — *Dec 2017–Jun 2022*

University of the West of Scotland — **United Kingdom**
B.A. (Hons) in International Business and Finance (GPA: 60.07/100) — *Sep 2016–Jul 2020*

Skills

Languages & Programming: Object-Oriented Python, C++, SQL, R

Python Libraries: NumPy, pandas, SciPy, scikit-learn, TensorFlow, PyTorch, FastAPI, Flask

Quantitative & Systems: Algorithmic Trading, Backtesting, Time-Series Analysis, Performance Engineering, Distributed Systems (Kafka), Risk Metrics, Optimization, Feature Engineering

Developer Tools: Git, Linux, SQL, Grafana, Prefect, Selenium, LangChain

Experience

Acuity Knowledge Partners — **Colombo, Sri Lanka**
Senior Data Engineer and Python Developer — *Oct 2021–Aug 2025*

- Engineered high-throughput Python data pipelines and RESTful APIs to deliver market data for a major U.S. asset manager, directly supporting quantitative research and trading algorithms.
- Led the end-to-end backend development of a data analytics platform using FastAPI, SQL, and SQL stored procedures; improved data processing efficiency by over 30% through automated feature engineering and ML model integration.
- Built an agentic text-to-SQL framework using LangChain, LangGraph, and vector databases (Pinecone) to enable natural language querying of complex financial datasets.
- Developed a high-performance Selenium application to extract and process social media data for sentiment analysis and market trend identification.

Projects

University of Colombo — **Colombo, Sri Lanka**
Algorithmic Trading using Technical and Sentiment Analysis — *Aug 2023–Feb 2024*

- Developed a web scraping pipeline using Selenium to gather Sri Lankan financial news; implemented a sentiment scoring model using Transformers (FinBERT).
- Designed and backtested an LSTM-based trading strategy combining technical indicators and sentiment scores, benchmarking performance against mean-reversion and-buy-and-hold strategies.
- *Keywords: Sentiment Analysis, Time-Series, Deep Learning, Backtesting*

Publications

2023: "A Stylometric Approach for Reliable News Detection Using Machine Learning Methods", with A.A. Sunethra, K.A.D. Deshani, 22nd ICTER Conference, DOI: 10.1109/ICTer58063.2022.10024096