Gia Tenica

Quantitative Researcher — Data Scientist — Machine Learning Specialist
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Professional Summary

A highly skilled and innovative quantitative researcher with 10+ years of experience specializing in machine learning, data analytics, and algorithmic trading. With an academic foundation in medicine and finance, I combine interdisciplinary knowledge to drive data-driven insights and develop predictive models for cutting-edge financial and tech solutions. Proficient in large-scale data analysis, advanced statistical techniques, and the application of ML algorithms to solve complex business challenges in the tech and finance industries.

Education

Ph.D. in Quantitative Finance & Computational Medicine 2012 – 2017
Universidad de Santarossa *Spain*

- Focused on financial models integrating healthcare data for predictive analytics in trading
- Dissertation: "Predicting Market Volatility Using Machine Learning Algorithms on Biomedical Big Data"

Master of Science in Data Science and Machine Learning 2009 – 2011
London School of Computational Analytics (LSCA) *UK*

- Specialized in the application of AI in financial analytics and healthcare forecasting
- Thesis: "Application of Neural Networks in High-Frequency Trading"

Bachelor of Medicine & Surgery (MBBS) 2004 – 2009
Universidad de Valverde *Spain*

- Graduated with honors
- Completed research on data analysis techniques for medical imaging and diagnostics

Experience

Lead Quantitative Researcher 2020 – Present
Argentis Trading Technologies *London, UK*

- Spearheaded research efforts in predictive modeling and machine learning for algorithmic trading systems
- Developed and implemented a suite of ML algorithms to optimize high-frequency trading strategies, resulting in a 15% increase in trade profitability
- Led a cross-disciplinary team combining finance, medicine, and AI to create innovative risk models integrating medical data for healthcare-focused financial products
- Conducted advanced time series forecasting and anomaly detection using deep learning frameworks (TensorFlow, PyTorch)

Quantitative Research Scientist 2017 – 2020
Vellum Financial Solutions *Madrid, Spain*

- Applied machine learning techniques to market prediction models, improving risk management strategies by 20%
- Designed algorithms for sentiment analysis using financial and health-related news to predict stock movements and market trends
- Collaborated with data engineers and analysts to integrate large-scale datasets from financial markets and medical research into unified research pipelines

Data Analyst — Machine Learning Specialist 2014 – 2017
Helix Innovations *London, UK*

- Contributed to the development of machine learning models aimed at optimizing biotech investment strategies based on historical data and medical innovation trends
- Led initiatives for building automated tools for data preprocessing and feature selection in large-scale financial datasets
- Worked closely with clients in the biotech and finance sectors to develop custom analytics platforms

Research Assistant, Department of Computational Medicine 2012 – 2014
Universidad de Santarossa *Spain*

- Conducted research on statistical models for predicting patient outcomes based on genetic and clinical data
- Published two papers on the integration of computational medicine techniques in financial forecasting
- Utilized machine learning to analyze large clinical datasets for early detection algorithms

Publications

Integration of Medical Data in High-Frequency Trading: A Hybrid Model 2018

- Journal of Advanced Quantitative Finance

Leveraging Deep Learning in Predictive Financial Models: A Case Study 2019

- Global Journal of Financial Technologies

AI in Financial Forecasting: A Comparative Study of ML Algorithms 2020

- Journal of Computational Economics

Conferences & Presentations

Speaker – Global Quantitative Finance Forum 2022

- "Using Neural Networks for Financial Time Series Prediction"

Panelist – International TechnoFinance Summit 2021

- "The Role of AI in Transforming Financial Risk Management"

Workshop Leader – Annual Machine Learning & Finance Symposium 2020

- "Machine Learning for Asset Pricing and Market Risk"

Awards & Recognitions

Best Paper Award – Global Quantitative Finance Forum (2021)
Tech Innovator of the Year – Argentis Trading Technologies (2021)
Best Researcher – Vellum Financial Solutions (2019)

Technical Skills

Programming & Tools: Python (Pandas, NumPy, scikit-learn), R, MATLAB, SQL, TensorFlow, Keras, PyTorch, Hadoop, Spark
Data Analytics & ML: Time Series Analysis, Predictive Modeling, Neural Networks, Supervised and Unsupervised Learning, NLP, Sentiment Analysis
Financial Analytics: Algorithmic Trading, Portfolio Optimization, Risk Modeling, Quantitative Research, Statistical Analysis
Domain Expertise: High-Frequency Trading, Asset Pricing, Market Microstructure, Financial Engineering, Healthcare Analytics

Languages

Spanish: Native | **English**: Fluent | **French**: Intermediate