COREY PRITCHARD

FX Quantitative Trader at Exinity | First Class MMath (MMORSE), University of Southampton
corey.pritchard2003@gmail.com | +44 7403 636953 | coreypritchard.com | linkedin.com/in/coreyjpritchard

PROFILE

FX quantitative trader specialising in market microstructure, volatility modelling, and systematic strategies; comfortable making decisions under time pressure and moving between production analytics and independent research.

EDUCATION

University of Southampton - Sep 2021 to Jul 2025

MMath (MMORSE), Operational Research, Statistics and Economics - First Class Honours

- Dean's List Award for Outstanding Achievement (5 times) across four years of study and overall degree performance.
- Modules: Stochastic Processes, Machine Learning, Quantitative Finance, Optimisation, Microeconomics, Macroeconomics.
- Year 4 dissertation on volatility models in Monte Carlo simulations (GARCH, Markov chains, deep learning for derivative pricing); Year 3 dissertation on portfolio optimisation via linear and quadratic programming.

PROFESSIONAL EXPERIENCE

Exinity, Junior Quantitative Trader - Nov 2025 to Present

- Develop Python analytics and automated pipelines used by the trading desk to monitor market conditions, liquidity provider performance, and execution quality across FX flow.
- Analyse liquidity provider routing and pricing stability to reduce hedging costs and improve client pricing and market depth.
- Build internal trading tools supporting inventory management, risk monitoring, and trader decision-making; deploy production data workflows on Linux servers.

Clearing, Junior Product Developer - Jun 2024 to Jul 2025

- Developed Python automation tools to replace manual reporting workflows, reducing operational workload by 10+ hours per week and improving data reliability.
- Built Python web scrapers (BeautifulSoup, Selenium) and lead-scoring models to identify high-value client prospects from large-scale datasets.
- Hired as a summer intern; role extended into a part-time position during university after automation tools proved valuable.

SELECTED QUANTITATIVE RESEARCH

Short-Only ES Futures Tail-Hedge System | Python, QuantConnect

- Designed and backtested (2019 to 2025) a short-only ES futures system using a 20-day moving-average crossover, framed as a tail-hedge complement to a long-gamma volatility-harvesting book; convex returns during dislocations (COVID-2020, 2022 bear market).
- Improved baseline with ATR-based entry filters and a volatility-collapse exit rule; addressed look-ahead bias and futures rollover handling in implementation.

Zero-Intelligence Limit Order Book Simulator | Python

- Implemented the Smith et al. (2003) zero-intelligence model for a continuous double auction; calibrated to Binance BTC/USDT and ETH/USDT Level 2 data and validated against theoretical spread, depth, and mid-price variance results.

Option Volatility Surface Calibration | Python

- Built an arbitrage-free volatility surface calibration framework using Black-Scholes and Heston models, with analytical Greeks for risk analysis and Monte Carlo pricing experiments.

TECHNICAL SKILLS

Programming: Python (NumPy, Pandas, scikit-learn, Statsmodels), SQL, C++, VBA

Quantitative Methods: Statistical modelling, time-series analysis, stochastic processes, Monte Carlo simulation, optimisation, machine learning

Markets and Trading: Market microstructure, limit-order-book modelling, options and volatility surfaces (Black-Scholes, Heston, Greeks), futures, systematic trading strategy design and backtesting

Tools: Git, Linux, QuantConnect, Jupyter, Matplotlib, Seaborn