Luca Sbardella PhD

Electronic Trading - Rust - Python

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Skills

Leadership I lead quants and developers teams to architect and implement trading systems for high- and mid-frequency electronic trading systems and strategies.
Coding Over fifteen years of professional experience with Python, over five years experience with Rust. I also code in Typescript, and I have past experience with C#, C/C++, FORTRAN.
Technologies Docker, Kubernetes, AWS, Azure & GCP, SQL (PostgreSql), Redis, Kafka, Prometheus/Grafana
Market Over five years professional experience in digital assets market making on crypto exchanges and OTC trading systems. Extended professional experience in fixed income and foreign exchange, cash & derivatives. Electronic trading strategies and risk management. Market making experience across all sport exchange-traded events.
Quantitative Time-series analysis, derivatives, stochastic modelling, term structure modelling, numerical solutions techniques, modern machine learning techniques
Interests Technology, investing, world economics, entrepreneurship, crypto, cycling, running, football, wine tasting

Employment

Owner - Quantmind - London **Nov 2008 - Present**

Intermittent Consulting Engagements
Provides independent consulting for project-based roles in electronic trading and market making, leveraging expertise in Rust, Python, quantitative finance and cloud computing. Engagements cover market making across exchange and OTC venues, algorithmic strategy design, low-latency execution infrastructure and the risk management framework around it.
Technologies: Rust, Python, TypeScript, PostgreSQL, Redis, Kafka, AWS Cloud, Kubernetes, Docker

Lead Algo Trading - Onyx Capital - London **Oct 2023 - Jul 2025**

Led a high performance team designing, deploying and managing scalable, low-latency infrastructure for commodity electronic trading.
Technologies: Rust, Python, PostgreSQL, Redis, Kafka, Azure Cloud, Kubernetes, Docker

Senior Quant - Byte Trading - London **Aug 2022 - May 2023**

Designed and implemented systematic trading technology for crypto exchanges, including market-making algorithms and risk management strategies, leading a small team of quant developers.
Technologies: Rust, Python, TypeScript, PostgreSQL, Redis, AWS, Kubernetes, Docker

Tech Lead - B2C2 - London **Aug 2020 - Jul 2022**

Led a team responsible for the OTC platform consisting of rest APIs, backend data, streaming services, customers market risk and post-trade analysis.
Technologies: Python, Rust, TypeScript, PostgreSQL, Redis, Kafka, AWS, Kubernetes, Docker

Head of Sport Algo Trading - Smarkets - London **Mar 2019 - Jul 2020**

Managed the sport algorithmic trading division of over twenty engineers and quant developers, plus ten operational traders, market making all exchange traded sporting events and providing over 80% of total liquidity.
Technologies: Python, Rust, TypeScript, PostgreSQL, Redis, Kafka, AWS, Kubernetes, Docker

CTO - Lendingblock - London **Mar 2018 - Feb 2019**

Engineered the creation of the first cloud platform for cross blockchain borrowing and lending, loans in cryptocurrency collateralized by other cryptocurrencies.

Technologies: Python, Typescript, Solidity, Ethereum Blockchain, PostgreSQL, Redis, AWS, Kubernetes, Docker

CTO - BMLL - London **Apr 2015 - Feb 2016**

Hired as consultant to build the development team and the technology product, a cloud based platform for limit order book (LOB) data and analytics.
Technologies: Python, Javascript, PostgreSQL, Redis, AWS, ansible

Director - Quantitative Analyst - Citi - London **Apr 2009 - Mar 2014**

Developed a web-based application for quantitative analysis of interest rate options strategies, working closely with the head of the exotic trading desk.
Technologies: Python, JavaScript, C, C++, R, Lua, Excel/VBA, PostgreSQL, Redis

Fund Manager - Investec Asset Management - London **Mar 2008 - Apr 2009**

Created a new Quantitative Hedge Fund product within an established Asset management firm.
Technologies: Python, JavaScript, R

Option Trader - Ulpia SA - Lugano **May 2006 - Sep 2007**

Ran quantitative trading in currency and currency options at a start-up Hedge Fund.
Technologies: C#, Excel/VBA

Strategist - JWM Partners - London **Oct 2003 - Mar 2006**

Developed quantitative and macro investment strategies in Fixed Income and Currency Volatility at an established Hedge Fund manager.
Technologies: C++, C#, Excel/VBA

Quantitative Analyst - Nomura - London **Apr 2000 - Aug 2003**

Researched and traded Fixed Income derivatives in a proprietary trading team.
Technologies: C++, Excel/VBA

Academics

PhD - Imperial College London - London **1996 - 2000**

Mathematical, numerical and computational modelling of the aerodynamics of internal flow machines such as turbofan jet engines. Research carried out in collaboration with the Rolls-Royce aerospace division.
PhD: Simulation of Unsteady Turbomachinery Flows for Forced Response Predictions
Publications: For a complete list of publications, please refer to Google Scholar

Laurea - Politecnico di Torino - Turin **1990 - 1995**

Five year degree in Aeronautical Engineering, with lectures in Mathematics, Physics, Calculus, Mechanics and Computing. Graduated with maximum mark 110/110.

High School - Liceo Scientifico Galileo Galilei - Adria **1985 - 1990**

Five years secondary school focused on mathematics, physics, literature, latin, history, chemistry, life sciences. Final mark 56/60.