

# LUCA SBARDELLA PhD

Quant Trading - Technology - Python - Rust - Typescript

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## Skills

**Leadership** Proven hands-on experience in designing, implementing and maintaining software products using opensource technologies, microservice driven architecture and cloud infrastructure.

**Coding** Over fifteen years of professional experience with Python, Javascript/Typescript, four years experience with Rust. Past experience with C#, C/C++, FORTRAN.

**Technologies** Docker, Kubernetes, AWS & GCP, SQL (PostgreSQL), Redis, Kafka, Git, Node.js, React.js, Pandas, Tensorflow, REST API, Websockets, Prometheus/Grafana

**Market** Three years professional experience in digital assets market making on crypto exchanges and OTC trading systems. Extended 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

**Methodologies** Event Driven, Agile, TDD, CI & CD, Infrastructure as Code

**Interests** Technology, investing, world economics, entrepreneurship, crypto, cycling, football, wine tasting

## Employment

**Owner - Software Development** - [quantmind.com](https://quantmind.com) - London

**2008 - Present**

This is my consulting company which I use for contract roles in quantitative finance, algo-trading, data analytics, machine learning, and full stack technological solutions.

*Technologies:* rust, python, typescript, AWS

**Quant Dev - Crypto systematic trading** - [byte-trading.com](https://byte-trading.com) - London

**Aug 2022 - Jun 2023**

I designed and implemented the technology for systematic trading on crypto exchanges. Developing several market making algos and manage risk with a small group of quant developers. Exchange connectivity services written in rust, data analysis and trading strategies in python.

*Technologies:* rust, python, typescript, AWS

**Tech Lead - Crypto currency OTC trading** - [b2c2.com](https://b2c2.com) - London

**Aug 2020 - Aug 2022**

I led a team responsible for the rest API, backend data and streaming services, customers market risk and post-trade analysis. We market make all crosses in over 30 crypto currencies.

*Technologies:* python, rust, typescript, AWS

**Head of Algo Trading** - [smarkets.com](https://smarkets.com) - London

**Mar 2019 - Jul 2020**

I managed the sport algorithmic trading division consisting of over twenty engineers & quant developers and ten operational traders. Market making sporting events 24/7 on Smarkets exchange, providing over 80% of total liquidity. I was part of the leadership team with daily interactions with all main stakeholders.

*Technologies:* python, rust, typescript, AWS

**CTO** - [lendingblock.com](https://lendingblock.com) - London

**Mar 2018 - Feb 2019**

I engineered the creation of the first cloud platform for cross blockchain borrowing and lending while managing an agile team of six in house engineers and four near shore consultants.

*Technologies:* python, javascript, AWS

**CTO** - [bmlitech.com](https://bmlitech.com) - London

**Mar 2015 - Feb 2016**

Consultant Chief Technology Officer at an early stage tech startup with the aim to build the development team and the technology product, a cloud based platform for limit order book (LOB) data and analytics.

*Technologies:* python, javascript, AWS

<b>Quant Dev - Director</b> - <a href="http://citigroup.com">citigroup.com</a> - London	<b>Mar 2009 - Mar 2014</b>
Development of a web-based solution for quantitative analysis of interest rate options strategies. Working with the head of the exotic trading desk. <i>Technologies:</i> python, javascript, C++	
<b>Quant Developer</b> - <a href="http://investec.com">investec.com</a> - London	<b>Mar 2008 - Sep 2007</b>
Creating a new Quantitative Hedge Fund product within an established Asset management firm. I was part of a group of five where I was implementing the technological and algorithmic part of the project. <i>Technologies:</i> python	
<b>HF Option Trader</b> - <a href="http://Ulpia">Ulpia</a> - Lugano	<b>May 2006 - Sep 2007</b>
Trading in currency and currency options at a start-up Hedge Fund in Switzerland <i>Technologies:</i> C#	
<b>Quant Developer - Strategiest</b> - <a href="http://JWM Partners">JWM Partners</a> - London	<b>Oct 2003 - Mar 2006</b>
Developing systematic strategies in European Fixed Income and Forex volatility trading at a macro & relative value Hedge Fund. <i>Technologies:</i> C#	
<b>Quant Developer - Prop Trader</b> - <a href="http://Nomura">Nomura</a> - London	<b>Apr 2000 - Aug 2003</b>
Quantitative analyst/trader in propriety trading group. Researching and trading in Fixed Income. <i>Technologies:</i> C++	

## Academics

<b>PhD in Computational Fluid Dynamics</b> - <a href="http://Imperial College London">Imperial College London</a> - London	<b>1997 - 2000</b>
Mathematical, numerical and computational modelling of aerodynamics of internal flow machines such turbofan jet engines. Research in collaboration with Rolls-Royce Aerospace division.	
<b>Laurea in Aeronautical Engineering</b> - <a href="http://Politecnico di Torino">Politecnico di Torino</a> - Italy	<b>1990 - 1996</b>
Five years university degree in aeronautical engineering covering mathematics, physics, calculus, computing. Final mark 110/110.	