# 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 - 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 - London**

Aug 2022 - Jun 2023

I designed and implemented the technology for systematic trading on crypto exchanges. Developing several market making algos and managed 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 - 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 - 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 - 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, solidity, AWS, Ethereum blockchain

#### CTO - bmlltech.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

Mar 2009 - Mar 2014

Development of a web-based solution for quantitative analysis of interest rate options strategies. Working with the head of the exotic trading desk.

Technologies: python, javascript, C++

**Quant Developer** - investec.com - London

Mar 2008 - Sep 2007

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. *Technologies*: python

**HF Option Trader** - Ulpia - Lugano

May 2006 - Sep 2007

Trading in currency and currency options at a start-up Hedge Fund in Switzerland *Technologies*: C#

**Quant Developer - Strategiest** - JWM Partners - London

Oct 2003 - Mar 2006

 $\label{lem:composition} Developing\ systematic\ strategies\ in\ European\ Fixed\ Income\ and\ Forex\ volatility\ trading\ at\ a\ macro\ \&\ relative\ value\ Hedge\ Fund.$ 

Technologies: C#

**Quant Developer - Prop Trader - Nomura - London** 

Apr 2000 - Aug 2003

Quantitative analyst/trader in propriety trading group. Researching and trading in Fixed Income. *Technologies*: C++

## **Academics**

PhD in Computational Fluid Dynamics - Imperial College London - London

1997 - 2000

Mathematical, numerical and computational modelling of aerodynamics of internal flow machines such turbofan jet engines. Research in collaboration with Rolls-Royce Aerospace division.

Laurea in Aeronautical Engineering - Politecnico di Torino - Italy

1990 - 1996

Five years university degree in aeronautical engineering covering mathematics, physics, calculus, computing. Final mark 110/110.