# 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, Javascript/Typescript, over five years experience with Rust. Past experience with C#, C/C++, FORTRAN.

**Technologies** Docker, Kubernetes, AWS, Azure & GCP, SQL (PostgreSql), Redis, Kafka, Prometheus/Grafana **Market** 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, football, wine tasting

# **Employment**

## Lead Quant Dev - Onyx Capital Group - London

Oct 2023 - Present

I Lead a high performance team responsible for designing, deploying, and managing scalable infrastructure for commodity electronic trading, ensuring low latency and high availability. *Technologies*: rust, python, azure

# Owner - Software Development - quantmind.com - London

2008 - Present

This is my consulting company which I use from time to time for contract roles in quantitative finance, algo-trading, data analytics, machine learning, and full stack technological solutions. *Technologies*: rust, python, typescript, aws

## **Lead 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 and trading engine written in rust, post-trade data analysis in python. *Technologies*: rust, python, typescript, aws

## **Head of Crypto OTC trading** - b2c2.com - London

Aug 2020 - Aug 2022

I led a team responsible for the OTC platform consisting of rest APIs, backend data, 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

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

## **Quant Dev - Director** - citigroup.com - London

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

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.