

Alberto Spina

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EXPERIENCE

Citadel - Software Engineer

April 2021 - Current

Commodities

- Python role architecting and building infrastructure for both Realtime and EOD pricing. Data feeds downstream to VaR and PnL informing trader decisions, analyst models and middle-office.
- Lead development of Commodities' domain-specific language written to support structured querying of pricing data with inbuilt algebraic capabilities. Project success has led to team-wide adoption.

Two Sigma - Software Engineer

August 2019 - April 2021

Venn - (May 2020 - April 2021)

- Full stack role developing Venn's Portfolio Analysis platform (Java backend, Typescript frontend).

TSIQ - (August 2019 - May 2020)

- Managed the deployment and orchestration of data scientist models on AWS in sandbox environments with inbuilt cross-model communication and persistence.
- Designed and implemented underwriting workflows in a Java-based policy management system.

G-Research - Software Engineer - Intern

April 2018 - September 2018

Technology Innovation Group

- Deployed self-service applications to wrap Ansible, VSphere and Active Directory operations.
- Benchmarked library and code performance on IBM Power9 CPUs and Nvidia V100 GPUs.

EDUCATION

Imperial College London, MSc Computing

October 2015 - June 2019

Master of Engineering in Computing. First Class Honours (81%). Dissertation 90%.

PROJECTS

XPC, MSc - Dissertation

October 2018 - June 2019

Reliable distributed consensus for low-power multi-hop networks (MSP430 chips with CC2420 radios).

DynamicFusion

October 2017 - January 2018

A dense SLAM system reconstructing non-rigid deforming scenes. Written in C++, leveraging PCL and OpenCV (image processing), Opt and Ceres (non linear solvers) and CUDA (GPU acceleration).

AWARDS, ACHIEVEMENTS AND PUBLICATIONS

EWSN 2020 Publication, XPC

February 2020

XPC: Fast and Reliable Synchronous Transmission Protocols for 2-Phase Commit and 3-Phase Commit.

ARM Project Prize, XPC

July 2019

Awarded annually for an outstanding individual project in the area of computer systems.

Dean's List, Imperial College London

July 2018

Awarded for achieving 82.5% in Third Year, scoring in the top 10% of the Year Group.

Palantir Forward Group Project Prize, DynamicFusion

January 2018

Awarded for an outstanding Third Year Group Project for Software Engineering excellence.

SKILLS AND LANGUAGES

Proficient with Python. Familiar with Java, C++, Typescript, UNIX, SQL and scripting.