

# Alberto Spina

📍 London, United Kingdom   ✉ alberto.spina.1996@gmail.com   🌐 www.spina.me   🐙 github.com/swarth100

## EXPERIENCE

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### Citadel - Software Engineer

April 2021 - Current

#### Commodities

- Python role supporting and building out infrastructure for 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

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### Imperial College London, MSc Computing

October 2015 - June 2019

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

## PROJECTS

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### 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

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### 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

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