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.