Alberto Spina

1st Floor Flat, 18 Woodstock Grove, London, W12 8LE alberto.spina.1996@gmail.com
(+44) 7340 489934 ◇ github.com/swarth100 ◇ www.spina.me

EDUCATION

Imperial College London *October 2015 - June 2019*
Master of Engineering in Computing.
Cumulative Average: 80%

EXPERIENCE

G-Research April 2018 - September 2018
Software Engineering Intern - Technology Innovation Group

- Designed and developed a fully-customizable Random Data Generator in Java with Yaml config files.
- Deployed easy-to-use MEAN applications to wrap Ansible, VSphere and Active Directory operations.
- Benchmarked library and code performance on different architectures, compilers and GPUs.

PROJECTS

DynamicFusion - computer vision *October 2017 - January 2018*
DynamicFusion is a dense Simultaneous Localization and Mapping (SLAM) system capable of reconstructing non-rigid deforming scenes. Written in C++ and built on top of KinectFusion, given an RGBD stream we perform model reconstruction using: PCL and OpenCV (image processing), Opt and Ceres (non linear solvers) and CUDA (GPU acceleration).

BaoBOS - robotic arm *August 2017 - September 2017*
BaoBOS is a hydraulic powered robotic arm built out of wood and syringes. Robot backend is written in C, interactions with objects are rendered in a digital environment using C++ with OpenGL.

Paging - web application *June 2017 - July 2017*
Built in a group of four using the MEAN stack (MongoDB, ExpressJs, AngularJs and NodeJs), Paging is an application meant to enhance the group planning experience using the Google Maps API.

Pintos - operating system *January 2017 - March 2017*
Working in a group of four we implemented Thread Scheduling, System Calls and Virtual Memory management for a simplified Linux-based operating system in C.

AWARDS AND ACHIEVEMENTS

Dean's List, Imperial College *July 2018*
Awarded for achieving 82.5% in year Three, result which is in the top 10% of the year group.

Palantir Forward Group Project Prize, DynamicFusion *January 2018*
Awarded to an Outstanding Third Year Group Project for Software Engineering Excellence applied to solve an Important Real-World Problem.

Olav Beckmann Project Prize, Imperial College *July 2017*
Awarded for outstanding second year undergraduate laboratory project work.

SKILLS AND LANGUAGES

Languages	Fluent in English and Italian. Well-versed in French.
Technical Skills	Proficient with C, C++, Java and Javascript. Familiar with C#, Python and Haskell. Basic knowledge of UNIX, SQL and scripting.