Luca Mehl

+44 (0) 759 879 7907 | luca.mehl@gmail.com | London, UK / Geneva, Switzerland

EDUCATION

Imperial College London MEng Computing (4th Year) 2020-2024

- **Modules:** Advanced Concurrency, Distributed Algorithms, Scalable Systems and Data, Reinforcement Learning, Computer Vision, Deep Learning, Network & Web Security

Master's Dissertation: Consensus in Drone Swarms (Supervisor: Prof. Julie McCann)

- Investigating decentralized distributed algorithms and communication protocols for enabling drone swarms to self-organize. (Ongoing)

International School of Geneva, Campus des Nations 2020

- IB Bilingual Diploma, English/French: **44/45**
- **HL**: Math 7, Physics 7, Geography 7 | **SL**: Chemistry 7, English A 7, French A 6

SELECTED EXPERIENCE

Software Engineering Intern, Dojo – March-September 2023

- Worked with the Consumer Products team to build a Restaurant Management System and consumer app with 100k+ weekly users.
- Worked with GCP (compute, storage, PubSub, Kubernetes), with Golang backend & GraphQL API
- Contributed to redesign of consumer app using React Native & Typescript

Software Lead, ICL Karman Space Programme (KSP) – 2021-2023

- Head of 5-person software team; primary systems architect for Mission Control and livestream networking. KSP aims to launch the first student-researched and designed reusable rocket to the Kármán line, the edge of outer space at 100 km.

Imperial College ICHack Finalist: Real Impact Hack – 2022

- Built a web app using Palantir Foundry to conduct a locational risk assessment of housing zones in California, based on ingest from earthquake, flood, and wildfire risk datasets, and proposed FEMA mitigation and adaptation strategies according to these risk factors.

MIT Beaverworks: Unmanned Autonomous Vehicle Synthetic Aperture Radar – Summer 2019

- Placed first in a team competition at MIT to build a multicopter-mounted radar imaging system.

PROJECTS

Cryptic Crossword Solver (Supervisor: Prof. Anthony Field)

- Built a **cryptic crossword-solving app** that supports image upload with real-time OCR followed by full-grid syntactic & semantic solving, with an interactive React Native UI.

PintOS Operating System

- Built a **UNIX operating system** in **C**, implementing scheduling (priority donation and multilevel feedback queue scheduling), user/kernel partitioning, system calls, and virtual memory.

SKILLS AND INTERESTS

- **Fluent in** English, French, and conversational in Spanish
- **Preferred programming languages**: Python, C, Java, Golang
- **Topics:** Advanced concurrency, distributed systems, scalability, computer vision, machine learning, IoT microcontrollers (Arduino, Raspberry Pi, ESP32), software verification
- Active member of the Imperial College **Mountaineering** and **Caving** Societies, and involved with the **Alternative Music**, Advanced Hackerspace and Robotics societies.

Transcript and references available upon request.