Luca Mehl

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EDUCATION

Imperial College London – Master of Engineering in Computing 2020–2024

- Grade: Upper Second Class Honours; First Class Honours in final year
- Selected modules: Robotics, Scalable Systems and Data, Distributed Systems, Computer Vision, Reinforcement Learning, Deep & Graph-Based Neural Networks

Master's Thesis – Supervisors: Prof. Julie McCann & Dr. Michael Breza (AESE group) 2024

- *SyncWave: Rapid and Adaptive Decentralized Time Synchronization for Swarm Robotic Systems* – (81%)
- Designed a decentralised time-sync protocol for large, sparse, rapidly changing drone swarms in no-GPS environments, achieving state-of-the-art speed and accuracy across 161 nodes in a physical testbed.
- Presented at EWSN 2026 (EMERGE Workshop)

International School of Geneva – Switzerland 2020

- IB Bilingual Diploma — Grade: 44/45

SELECTED EXPERIENCE

Software Engineer II – Meta – London, UK Jul 2026–Present

- Building the Inference Platform for the largest and most heterogeneous fleet of GPUs at Meta, serving all GPU-based AI models in the Ads organisation (100k+ GPU cards).
- Developing a Gurobi-based mixed-integer programming solver to optimise the allocation of ML models across GPU hardware and regions across the entire Ads GPU fleet every 5 minutes.

Software Engineer – Meta – London, UK Apr 2025–Jul 2026

- Built Meta's internal capacity ordering system (like GCP or AWS). Processing capacity orders worth billions per quarter.
- Refactored the entire platform to support multi-tenancy, unlocking 2 new tenant organisations and half a billion dollars per year in additional capacity.

Software Engineering Intern – Dojo – London, UK Apr–Sep 2023

- Re-architected Go/GCP services and GraphQL APIs, reducing on-call investigation time from one hour to one second for a product serving 100K+ weekly users.

Software and Avionics Engineer – Imperial College Karman Space Programme Feb 2022–Aug 2023

- Led a 6-member software team (Mission Control, livestream networking, and live telemetry) within a 90-person project to launch the first student-designed reusable rocket to reach the Kármán line (100km).

Beaver Works Summer Institute – MIT Lincoln Laboratory Feb–Aug 2019

- Selected for a 12-week engineering programme building drone-mounted synthetic aperture radar; placed first in the final team competition.

PROJECTS

Cryptic Crossword Solver 2023

- Built an interactive cryptic crossword-solving mobile app, including OCR for grid + cryptic clue extraction, and pattern-matching and vocab list-based syntactic + semantic clue solving.

PintOS Operating System 2022

- Built a basic UNIX-like operating system in C, including MLFQ scheduling, system calls, and virtual memory.

SKILLS & INTERESTS

- **Programming languages:** Python, C++, C, Hack/PHP, Bash, Go, Java
- **Systems & infra:** Linux, TCP/IP networking, LP/MIP solving, Gurobi, Kubernetes, PyTorch
- **Languages:** English, French
- **Other interests:** Rock climbing, mountaineering, jigsaw puzzling, Mahjong