

# Mateusz Lichota

I strive to become the 10x programmer.

mateusz@lichota.net  
github.com/mateusz-lichota

## EDUCATION

---

### MEng Computing (AI and ML) @ Imperial College London

Oct. 2021 – Present

The most selective program at Imperial with 5% acceptance rate

London, UK

### BSc Artificial Intelligence @ University of Edinburgh

Sept. 2020 – Sept. 2021

78.2% overall result (First Class)

Edinburgh, UK

## EXPERIENCE

---

### Team Captain @ Imperial Driverless

Oct 2021 – Present

A student led autonomous vehicle initiative at Imperial College London

London, UK

- **HR experience:** Personally interviewed over 80+ applicants, ensuring bias-free, merit-based admittance.
- **Project management:** Managing a team of 27 students (UG, PG, PhD) working on autonomous vehicle software.
- **Software integration:** Overseeing the integration of real-time, high-speed computer vision software with SLAM algorithms and industrial-grade simulation software (Gazebo, Mit AV simulator) using ROS2.

### Junior Full Stack Engineer @ Clastify

Sept. 2020 – Jun. 2021

A company providing International Baccalaureate study materials [www.clastify.com]

Edinburgh, UK

- **Creating Impact:** Initiated and participated in website migration from React to Next.js, leading to a 60% reduction in the time to interactive (TTI) metric and smoother end user experience.
- **DevOps Initiative:** Convinced company management to use Docker for deployments; successfully implemented a zero-downtime deployment system resulting in 30 minutes downtime reduction per deployment.
- **Cloud experience:** Set up static content distribution on AWS, leading to 40% reduction in TTFB and 20% in TTI.
- **Engagement:** Implemented a document recommendation engine in my free time, leading to better user engagement as evidenced by a 30% bounce rate decrease.

### Team Captain @ ArctowSky Cansat

Sept. 2018 – Jun. 2019

The Polish team at the European Space Agency *CanSat* engineering competition

Warsaw, Poland

- **Leadership:** Led a team of six to win the **1st place nationally** and **2nd place in Europe**.
- **Embedded Systems:** Mastered the operation of Raspberry Pi, worked with ARM-based microcontrollers.
- **Computer vision at the edge:** Utilized a hardware accelerator to run a CNN on an airborne scientific probe.
- **Live data visualization:** Visualized live data using Plotly.js in an Electron-based dashboard.

## ACADEMIC RECOGNITION

---

**Recognized team member @ ESGI165 Study Group:** Authored the "Refined Spatial Tree" and "Hierarchical Spatial Tree" approaches (Section 4.1 in *Determining the conductance of networks created by randomly dispersed cylinders*).

**Co-author of an ESA-published paper:** *In-flight terrain mapping using Convolutions Neural Network*

**National Fund for Talented Youth Scholarship:** A highly selective (< 500 recipients) scholarship and mentorship.

**Warsaw *Sapere Auso* Scholarship:** A prestigious scholarship awarded to around 100 students annually.

**27th Polish Informatics Olympiad:** 2<sup>nd</sup> score nationally in data science (text author identification).

## PROJECTS

---

**Imperial Test Suite Runner:** A VSCode extension used by over 40% of my cohort to test their Haskell code.

**Open source contribution:** Implemented the 'relay' tool in C++17 and got it merged into the ROS2 toolchain.

**High speed algorithmic trader:** 2<sup>nd</sup> largest profit in a market simulation during the HEX Cambridge hackathon.

## PROGRAMMING SKILLS

---

**Python:** Pytest, Pydantic, FastAPI, NumPy, Matplotlib, OpenCV, Keras, Good knowledge of the standard library

**Javascript:** Node.js, React, Next.js, Electron, Plotly.js

**Technologies:** Linux, Docker, Git, GitLab, GitHub, ROS2, AWS, GCP, MongoDB, PostgreSQL, Mathematica

**Other languages:** C++, Java, Haskell, Bash, HTML, CSS, Wolfram Language, L<sup>A</sup>T<sub>E</sub>X