

Jakub Michalski

✉ j-michalski@outlook.com [in linkedin.com/in/j-michalski](https://www.linkedin.com/in/j-michalski) +44 7553 457560

Education

Imperial College London (Undergraduate)

BEng Computing, Dean's list, on track for First-Class Honours

- **Notable modules:** Algorithms, Operating Systems, Software Design, Compilers, Databases
- **Taught languages:** Java, C, Scala, Kotlin, Haskell

London, UK

2021-to date

Dubai College (GCE Advanced Level)

Computer Science, Further Mathematics, Mathematics and Physics with A in all subjects*

Dubai, UAE

2019-2021

Experience

Software Engineering intern @ Hudson River Trading

Summer internship lasting 11 weeks, working in C++ and Python

- Improved an internal tool's performance by 40%
- Designed and implemented new gRPC services to reduce trading downtime

NYC, USA; London, UK

July-September 2023

Co-founder @ Imperial Driverless

Co-founded team taking part in Formula Student AI (autonomous vehicles competition)

- Real-time latency-critical processing of sensor data, including cameras (via YOLOv7) and LIDAR
- Maintaining a large C++ and Python code base using ROS 2 for inter-component communication

London, UK

November 2021-March 2023

Spring insight @ Citadel

Lectures on applications of computer science to trading

London, UK

April 2022

Mentorship @ NTT Data

Practically implementing machine learning algorithms using industry best-practices based on prior teaching

- Published a research paper in the JEI

Chennai, India

2019-2021

Head of Mathematics Society @ Dubai College

Lead a team of 20+ members to organise activities for all year groups

- Organised a city-wide mathematics competition with 100+ attendees

Dubai, UAE

2019-2020

Projects

WACC: language compiler written in Scala 3 with an SSA extension

Pintos: extending a simple multithreaded operating system written in C

ARM11: assembler and emulator developed in C

Fridge Buddy: ingredient tracking and recipe recommendation web app written in React with Flask

Robot that plays UNO: Monte Carlo Search Tree, image processing, self-written neural network

Trading bot: technical indicators, fundamental analysis, sentiment analysis

LaunchMi: Social media iOS app developed in Swift with Firebase

Visualisations: sorting and searching algorithms and a unit converter (Django, Bootstrap, JavaScript)

Achievements

IC Hack: 2022 and 2023 winner, Optiver Optibook 3rd place

G-Research coding challenge (2022): 2nd as a team

Research paper (2021): published in the Journal of Emerging Investigators (JEI)

ISMTF (2021): international mathematics competition, 1st place as a team and 9th individually

UKMT (2020): Senior Mathematical Challenge, Gold certificate (115/125 points)

GCSE: Early entry Mathematics, 100%, Best in the World award, Further Mathematics 100%

Languages

English (bilingual), Polish (native), German (communicative)