Ionuț-Cătălin Crăciun

27 Pacurari Street, Iasi, Romania, Postcode 700535
M: (+40)745411347 / (+44)7765538431 **| E**: icatalincraciun@gmail.com

EDUCATION & QUALIFICATIONS

MEng Electrical and Electronic Engineering, Imperial College London   **2018 - 2022**
- Achieved 2:1 in First Year and Second Year – Modules included: Machine Learning, Algorithms and Data Structures, Software Engineering, Embedded Systems, Computer Architecture, Electronics lab.

Mathematics and Computer Science, The National College, Iasi, Romania   **2014 - 2018**
- Romanian Baccalaureate:
Mathematics (10.00/10 – A*), Physics (9.95/10 – A*), Romanian Language and Literature (9.60/10 – A*).

Engineering Projects

Elephant Listening Project, Microsoft Project 15   **2021 - present**
- Currently working with a team of five together with Microsoft to create a detector for recognizing and classifying gunshots by using Machine Learning; the project aims to conserve the tropical forests of Africa.

Fitness IoT Device – Head of Web Development   **2021 January - March**
- Developed an IoT product that communicates data through the Internet with Raspberry Pi; the sensors interpret the motion of legs and arms and provide feedback based on the execution correctness of sport exercises
- Created a website using Flask and Python to promote our product and to communicate with the device.

Device for helping mobility-impaired people – Head of Hardware Systems   **2019 - 2020**
- Worked in a team of seven to successfully design a sip-and-puff and speech-to-text device that can be used by mobility-impaired people to control a computer; awarded 3rd place out of 19 participant teams
- Produced reports on budget management, market analysis, design criteria and concept development
- Used Python and C++ to create the software behind our product.

Mini-electrical rover device – Head of Hardware Systems   **2018 - 2019**
- Worked in a team of five to successfully develop a remotely-controlled rover that can detect different types of electromagnetic and acoustic waves and avoid different obstacles; awarded 1st Place out of 20 participant teams
- Designed 4 different sensors for radio, acoustic, magnetic and infrared waves detection.

RELEVANT EXPERIENCE

Mathematics tutor at MyTutor.co.uk   **2020 – present**
- Conducted one-to-one tuition in Mathematics to school students aged 8-to-18, providing a customized approach depending on the student's objectives (e.g. exams, university interviews preparation, etc.).

Undergraduate Teaching Assistant   **2019 - present**
- Led lab sessions and theoretical classes with about 50 first-year students in Analysis and Design of Circuits
- Debugged C++ code and circuits and provided support by explaining technical and practical concepts
- Was one of the 3 undergraduate students allowed to teach beside the professors and postgraduates.

Imperial Student Formula Team   **2019 – 2020**
- Used C++ in developing an Accelerator Pedal Position Sensor that transmits the pedal position to the MCU
- Was invited to lead a group of 10 students on electronic systems projects for the Shell Eco-marathon Team.

SKILLS & INTERESTS
- Technical skills: C++, Matlab, Python, Assembly Language, Verilog.
- Interested in learning a little about a lot, keen on investment strategies, financial markets, cars, technology
- Languages: Romanian (native), English (Fluent), French (Intermediate).