

## **Ionuț-Cătălin Crăciun**

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### **EDUCATION & QUALIFICATIONS**

#### **MEng Electrical and Electronic Engineering, Imperial College London**

**2018 - 2022**

- Achieved 1<sup>st</sup> Class grade in 3<sup>rd</sup> year – Relevant modules: 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**

**Apr – Jun 2021**

- Worked in a team of five together with Microsoft to successfully deliver a machine learning algorithm that identifies 95% of the gunshot sounds; our work will contribute at conserving the African rainforests.
- Tested and learnt about multiple machine learning techniques: Faster R-CNN, Yolov4, CNN, RNN.

#### **Fitness IoT Device – Head of Web Development**

**Jan – Mar 2021**

- 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 3<sup>rd</sup> 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 1<sup>st</sup> Place out of 20 participant teams
- Designed 4 different sensors to detect radio, acoustic, magnetic and infrared waves.

### **WORK EXPERIENCE**

#### **Consulting Intern at Roland Berger, Bucharest**

**Aug – Oct 2021**

- Conducted quantitative and qualitative research through model-building, mystery shopping exercises and client interviews, helped generate and critically evaluate recommendations, structured the results of the analyses and integrated them into the final deliverables and presentations.

#### **Technology Intern at London Stock Exchange Group, Bucharest**

**Jun – Aug 2021**

- Delivered Cloud requirements in AWS such as landing pages, cloud account governance and security policies, cost monitoring and control, application performance monitoring, CI/CD pipelines and infrastructure code
- Successfully completed a cloud engineering team's task by fixing a bug in a cloud security service
- Solved C++ coding challenges as a part of the internship tasks.

#### **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 besides the professors and postgraduates.

### **SKILLS & INTERESTS**

- Technical skills: C++, MATLAB, Python, Assembly Language, Verilog, Microsoft Office package
- Interested in learning a little about a lot, keen on coding, investment strategies, financial services, technology
- Languages: Romanian (native), English (Fluent), French (Intermediate).