

Nicolas El Chammas

Mechatronics and Robotics Engineering (MEng) – The University of Leeds

Email: nickchammas9@gmail.com

LinkedIn: [linkedin.com/in/nicolas-el-chammas-465925236](https://www.linkedin.com/in/nicolas-el-chammas-465925236)

PERSONAL PROFILE

Multi-lingual recent graduate in Mechatronics and Robotics Engineering (MEng) with expansive experience in designing, programming, and simulating platforms; combined with an ever-growing interest in the User-centered Technology field. Gained practical experience working as a Robotics Engineer for the Cobot company Islington Robotica, and improved my organizational and collaborative skills through my volunteering with the Rebirth charity. Eager to join an organization that will reinforce my multidisciplinary engineering background and expose me to valuable industry insight.

EDUCATION

[University of Leeds, School of Electronic and Electrical Engineering • 2018 – 2022](#)

[Mechatronics and Robotics Engineering \(MEng\)](#)

Graduated with a 2:1.

MODULES
Sensors, Actuators and Mechanisms (MECH 2200)
Electronic Circuit Design (ELEC 2130)
Modern Industry Practice (ELEC 5032M)
Design and Manufacture for Mechatronics and Robotics (MECH 2300)
Power Electronics (ELEC 2530)
Artificial Intelligence (COMP 2611)

[Lycée Franco-Libanais Alphonse de Lamartine \(School\) • Lebanon • 2004 – 2018](#)

French Baccalaureate • 2016 – 2018

Overall average of 14.7/20. Assessment was comprised of various disciplines: Mathematics, Advanced Mathematics, Physics & Chemistry, Biology, English Literature, French Literature.

RELEVANT MODULES AND ACADEMIC PROJECTS

[ELEC2645 – Embedded Systems Project](#)

- Project entailed using C++ to create a game on the Mbed platform and implement it on a “Gamepad”.
- Created a functional and dynamic “space rocket” inspired game a user-friendly homepage.

[COMP3611 – Machine Learning](#)

Module that focused on the Algorithm Choice and Training topics. It dove into the intricacies of Neural Networks and their different types and applications and paralleled the theoretical information with mathematical and computational Python-based exercises.

[COMP3631– Intelligent Systems and Robotics](#)

- Group project: designing a python program that controls a Turtlebot in a simulated Gazebo environment, on Linux.
- Successfully programmed the goal-driven movement to efficiently move the Turtlebot from one room to another and smoothly transition from one colour/character detecting task to the next.

[MECH3895 – Individual Mechatronics and Robotics Project](#)

- Project: created a Virtual Reality-integrated glove design to use as an interface for wrist rehabilitation.

- Developed an ergonomic glove using human-centered designing, iterative Solidworks CAD prototyping, and MATLAB-based kinematics testing.
- Created a VR-friendly interface and two immersive and customizable VR games on Unity.

MECH5030 – Team Project

- Project aimed to develop a wearable haptic device to efficiently aid deafblind people with indoor navigation whilst prioritising their personal experiences and perceived needs.
- The individual contribution: front-end user insight research, control system design, PCB design/simulation, human-centered design and testing of haptic processes and accompanying hardware.

WORK EXPERIENCE

Robotics Engineer Intern at Islington Robotica (20/03/2023 – 07/06/2023)

This internship entailed conceptualizing, developing, and implementing autonomous navigation software for an assistive at-home robot. The ROS-based automated navigation process was developed on Linux using Python and included an optimized global planner in addition to a sonar-based reactive obstacle avoidance feature. The team also worked on the integration of sonar sensors and extensively understanding the robot's components and detailed assembly.

Podcaster at Medentee LTD (12/07/2023 – 18/09/2023)

Freelanced as a Podcaster for the medical technology platform Medentee. Aided in setting up a MedTech podcast by prepping interview topics and questions, curating a list of possible guests and brainstorming UX design ideas for the platform and podcast

Mechatronics Engineer Intern at Babikian Automation (01/10/2024 – 10/01/2025)

Aiding the startup with various projects that call for the use of my skills in Additive Manufacturing, Internet of Things, Product Prototyping, Mechanical Design and other Mechatronics skills such as PCB design and embedded programming. Involved in a project's full development cycle and currently finalizing the PCB design for a snail electric fence with an integrated sensing system.

TECHNICAL SKILLS

- Proficient in several systems and platforms: MATLAB , Mbed, Solidworks, Autodesk Fusion 360, ModelSim, LabView, Gazebo and Unity platforms.
- Competent in coding languages: C/C++, python.
- Fluent in the English, French and Arabic languages (speaking, reading and writing).

OTHER SKILLS AND ACHIEVEMENTS

- Successfully finished the “[Human Factors and Usability EGINEERING](#)” course provided by The Arizona State University. (Decembre, 2024)
- [Volunteer with the Rebirth charity \(15/10/2023 – 05/07/2024\)](#)
Joined a charity called Rebirth which aims to facilitate access to higher education for children who have been in care. I joined the committee team in which I lead the development of the charity's mentoring training program, whilst still helping with logistics and event planning.
- [Teamwork and Adaptation](#)
Won second place in MedTech's Leeds Innovation Program and got invited to share the biotech concept at Bionabu's online MedTech Student Showcase in 2022. The program task called for collaborative work between engineering, medicine, and business students; centered around conceptualizing and designing a market-ready medical device.