# Marc Anthony Fayad

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#### **PROFILE**

A 4<sup>th</sup> year Electrical and Computer Engineering student at the American University of Beirut. Specializing in control and intelligence systems and pursuing a minor in Economics. Possesses a deep understanding of coding in Python, C++, and VHDL. Looking to apply my analytical skills and creativity in the consulting field.

## **EDUCATION**

## American University of Beirut | Beirut, Lebanon

09/2019 - Expected: 06/2023

Bachelors of Electrical and Computer Engineering, minor in Economics.

Good academic standing, Life Scholar since 2021.

## International College | Beirut, Lebanon

09/2016 - 06/2019

International Baccalaureate program, graduated with distinction.

#### **WORK EXPERIENCE**

# Interdisciplinary Design Practice Program | Beirut, Lebanon

08/2022 - Present

Work-study program at AUB. Role: Design-thinking Consultant.

- Work to implement human-centered tools in core courses at AUB.
- Help improve student life at AUB through human-centered design projects.
- Interviewed over 20 students and professors to understand and address user needs at AUB.

## Oculi | Beirut, Lebanon

06/2022 - 08/2022

Oculi is an innovative semiconductor company that produces the one-of-a-kind Oculi SPU (sensing & processing unit). **Role:** Computer Vision Engineer, helped develop novel solutions to problems in the video conferencing industry.

- Developed python scripts for facial recognition, user presence, and gesture control.
- Added over 200 lines of code to improve already existing Oculi detection algorithms.
- Collected and labelled over 10,000 images to test machine learning algorithms.

# Associated Consulting Engineers (ACE) | Beirut, Lebanon

12/2021 - 01/2022

A multi-disciplinary architectural and engineering consultancy firm. Role: Electrical Engineer Consultant.

- Helped digitize, design, and run circuit maps for residential villas using AutoCAD and DIALux.
- Advised over 10 clients on the optimal circuit maps and electrical systems to use.

## **SKILLS**

AutoCAD, DIALux, Coding: Python, C++, VHDL, and RISC-V.

Languages: Fluent in English, Arabic, and French.

## **PROJECTS**

**Final Year Project:** Under the sponsorship of Oculi developed a deer detection algorithm using the Oculi SPU outputs, and implemented these algorithms on raspberry pi hardware to act as a deer deterrent system.

University Innovative Fellows (UIF): Conducted extensive research and interviewed over 30 students and professors to create a 20-page outline for a course that will soon be offered at AUB. This course aims to unlock the creative potential and develop the design-centered mindset of students at AUB.

**Human Centered Design:** Interviewed 8 citizens of Hamra and created a 20-page portfolio on redesigning Hamra street for the benefit of the community. Grade received: A.

**Reconfigurable Computing:** Developed hardware and software codes for AXI-Lite SPI master block used to interface with a Digilent Pmod ACL 3-axis accelerometer.

# **EXTRACURRICULARS**

**Volleyball:** Captain of International College Men's Varsity Volleyball team. Starter for the American University of Beirut Men's Varsity Volleyball team.

Football: Organized weekly football games for less fortunate kids in Lebanon.

**Sustainable Energy for All:** Part of the Heating Up a Village (HUV) subcommittee and working on using the reverse osmosis process for water purification at AUB.

Investment Club, 180 Degrees Consulting, IEEE society.