# **OMAR JAROUDI**

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## **OBJECTIVE STATEMENT:**

A computer and communications engineering student capable, with strong academic merit and prior experience, of applying engineering concepts and inventive approaches to achieve given objectives.

### **EDUCATION:**

American University of Beirut, Beirut Lebanon (Sep 2017-June 2021)
Bachelor's degree in Computer and Communications Engineering, GPA: 4/4, Dean's Honor List

### **WORK EXPERIENCE:**

• Murex Systems – Beirut, Lebanon (June 2020 – Aug 2020)

Integration Development Intern: Developed, tested, and deployed proof-of-concept MuleSoft applications to tackle upgrades related to API-led connectivity functionalities, including:

Message broker: Upgraded the message broker used by the team, ActiveMQ 5.x, to its

next-generation successor, ActiveMQ Artemis.

Mule runtime engine: Upgraded the runtime engine from Mule 3 to Mule 4.

• Apliman Technologies – Beirut, Lebanon (Aug 2019)

Software Development Intern: Developed and tested functionalities of application software including:

Web development: Tested back-end functionalities of web applications that use Spring and

Hibernate frameworks.

Data science: Implemented clustering algorithms to classify incoming user data and

improve automated decision-making accordingly.

• American University of Beirut – Beirut, Lebanon (Sep 2018 – Dec 2018)

Teaching assistant: Prepared and presented lab sessions for an introductory programming course with C++ and Matlab.

# **RESEARCH EXPERIENCE:**

• <u>Contact-free heart rate estimation (July 2019 – Feb 2020)</u>: Designed a program using Python to measure human heart rate without skin contact, by analyzing variations of RGB pixel values in videos of a person's face. The project was supervised by a professor at AUB and sponsored by a third-party organization.

### **PROJECT EXPERIENCE:**

- <u>Final Year Project:</u> Currently developing a lightweight software solution for a vulnerability in smartcard payment systems, known as the relay attack, that introduces minimal complexity to the current smartcard payment protocol.
- <u>Airplane Parking Reservation</u>: Created a multithreaded client-server application, using Java, that implements a parking system for airplanes; the application included a GUI and an SQL database.
- Optimized Bus Routes in Beirut: Simulated an optimized public transport grid for the city of Beirut by implementing parallelized path-planning algorithms using CUDA.

### **SKILLS:**

Programming: Python, Java, C++, MuleSoft, CUDA, VHDL, SPICE, RISC-V

Languages: English (Fluent), Arabic (Native), French (Basic)

Other: MS Office

### **VOLUNTEERING EXPERIENCE:**

Volunteered as a literacy tutor for a group of underprivileged children over a period of 9 months.

### **EXTRACURRICULAR ACHIEVEMENTS:**

- Participated in the Model United Nations (MUN) conference, and gave speeches representing Cambodia in the International Atomic Energy Agency (IAEA) committee.
- Al Riyadi Club basketball varsity team class of 2000.
- Participated in national rapid chess tournament.
- Member of the Institute of Electrical and Electronics Engineers (IEEE).