

# OMAR HAMMOUD

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Lausanne, Switzerland

## EDUCATION

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**Swiss Federal Institute of Technology Lausanne (EPFL)** *Lausanne, Switzerland*  
*Bachelor of Science in Computer Science* *Sept. 2021 - Jul. 2024 (expected)*

• **Relevant Courses:** Algorithms, Functional Programming, Parallelism and Concurrency, Computer Architecture, Multiprocessor Architecture, Data Intensive Systems, Software Engineering, Computer Language Processing, Computer Networks, Computer Security and Privacy, Object Oriented Programming, System Oriented Programming, Probability and Statistics, Algebra, Graph Theory, Machine Learning, Theory of Computation

## PROJECTS

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- **Android Mobile App:** *[Kotlin]* Collaborated with 6 classmates to produce 'FeedMe', a mobile app that helps you find recipes for you to cook by inputting ingredients (manually, scanned or by image) all while following your friends and sharing your recipes with them. Used Google Firebase as our data management backend.
- **Bicycle Pathfinder:** *[Java]* Advanced pathfinder for bicycles all over Switzerland's area using OpenStreetMap for data and JavaFX for graphical interface. Gives the most efficient route between two or more pinpoints using Dijkstra's algorithm, considering multiple indicators such as distance, elevation and bird's eye view.
- **Unix v6 Filesystem:** *[C]* A simplified version of the Unix v6 filesystem of the 1970s, constructed the skeleton of the system through a hierarchy of layers: sector, mount, inode, and directory.
- **Snake:** *[Assembly, VHDL]* Snake minigame coded on a Gecko4Education Board. The FPGA is programmed to manage game logic, input handling, and screen output (LEDs).
- **Crossy Cat:** *[C]* A simplified remake of the 'Crossy Road' mobile game programmed on a Nintendo DS using the libnds library.
- **Advance Wars remake:** *[Java]* A simplified remake of the 'Advance Wars' Gameboy game.

## SKILLS

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- **Programming Languages:** Java, C, Python, Scala, Assembly, VHDL, Verilog, SQL, Kotlin
- **Others:** Git, Dynamic Programming, Parallel Programming, Concurrent Programming, Object-Oriented Programming, Functional Programming, Pipelining, GPU Programming, Graph Theory, Android Development, Docker, CI/CD
- **Hobbies:** Golf, Ski, Tennis, Gym, Biking, Swimming
- **Languages:** Fluent in French, English and Arabic (native)

## EXPERIENCE

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- **Student Assistant - Fundamentals of Digital Systems course** *Feb. 2024 - Present*  
*Swiss Federal Institute of Technology (EPFL)* *Lausanne, Switzerland*
- **Student Assistant - Computer Architecture course** *Sept. 2023 - Jan. 2024*  
*Swiss Federal Institute of Technology (EPFL)* *Lausanne, Switzerland*
- **Catering Manager** *Nov. 2022 - Oct. 2023*  
*Students 4 Students (Catering Committee) - EPFL* *Lausanne, Switzerland*
- **In-Flight Services Traineeship** *Aug. 2023*  
*Middle East Airlines (MEA)* *Beirut, Lebanon*
- **Mechanical and Electrical Engineering Traineeship** *May 2019*  
*Zoom Electrical Contracting Co* *Beirut, Lebanon*