Mohamad Hazim *Electrical and Computer Engineer*

mmh164@mail.aub.edu

https://www.linkedin.com/in/mohamad-hazim31/

https://github.com/MohamadMHazim

https://mhmdhazim-portfolio.netlify.app/

Education

2024/08 – present **Masters of Science, Computer Science**
American University of Beirut

2020 – 2024 **Bachelor of Electrical and Computer Engineering**
Beirut Arab University

Professional Experience

2024/08 – Present **Graduate Teaching Assistant**
American University of Beirut

- **Teaching Assistant (Fall 2024–Present)**
  Introduction to Python Programming — AUB AI & Data Science Online Graduate Professional Diploma
- **Lab Instructor (Spring 2024–25)**
  CMPS201: Intro to Programming in Java
  CMPS203: Programming for Everyone (Python)
- **Lab Instructor(Summer 2024–25)**
  CMPS203: Programming for Everyone (Python)

2024/07 – 2025/01 **Full Stack Developer (Contract)**
The Cameleon
Making changes to a project and performing various tasks using ReactJS, NodeJS, MongoDB, and AWS in a project-based position.

2023/10 – 2024/05 **Full Stack Developer (Freelance)**
Connexion

- Took primary responsibility for the back-end security, implementing robust measures to protect sensitive data and ensure system integrity.
- Collaborated closely with the team to understand and gather requirements for the project.
- Designed and implemented the backend using Node.js, with a focus on efficient server-side functionality.
- Integrated the Whish Money API for seamless payment processing.

2023/07 – 2023/09 **Full Stack Developer (Intern)**
Tripotek
Built a secure, responsive web application using React for UI, Node.js for RESTful API integration, and implemented authentication and authorization for protected access.

Skills

Web Development
- ReactJs
- NodeJs

BaaS
- Firebase
- Aws

Cybersecurity
- Data Encryption
- Secure Authentication Protocols
- Vulnerability Assessment and Penetration Testing

Databases
- MySQL
- PostgreSQL

Additional Languages
- C
- Python
- Java.

Research Papers & Graduate Studies Projects

Modelling and Performance Analysis of Softwarized Switches in Cloud Datacenters
Fall 24/25
Conducted a comprehensive study on the performance and scalability of softwarized switches in cloud datacenters. Developed models to evaluate their efficiency and analyzed key performance metrics to optimize data flow and network reliability in cloud environments.

Data Leakage in Cloud Computing
Fall 24/25
Authored a research paper focusing on data leakage issues in cloud environments, with a primary emphasis on API security in cloud computing. Explored vulnerabilities in API design and implementation, proposing solutions to enhance security and mitigate risks associated with data breaches.

Non Factoid Question Answering
Spring 24/25
Developed a hybrid Non-Factoid Question Answering (NFQA) system using keyword-based question classification, spaCy-based Named Entity Recognition, and semantic ranking with sentence embeddings (MiniLM), achieving a 19.7% improvement in NDCG@10 over baseline on the nfL6 dataset.