

Mohammad Alhalim

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Education

Beirut Arab University – B.Eng. in Computer Engineering Jun 2026
• Member of IEEE Student Chapter, AI & Robotics Club, and PMI.
Lebanese Baccalaureate – Life Sciences Jul 2022

Experience

AI Intern – Wakilni July 2026
• Engineered data preprocessing pipelines for transactional logistics data, aggregating daily package volumes across distinct zones and clients.
• Designed robust time series feature engineering architectures using group based historical lags and rolling windows to eliminate data leakage.
• Developed and validated predictive baseline models using LightGBM and XGBoost frameworks to forecast distribution counts.
System Administrator Intern – Rafic Hariri University Hospital Summer 2025
• Managed Active Directory, Group Policy, and Windows Server; configured DHCP, DNS, RAID, DFS, and roaming profiles.
• Documented deployment and maintenance of Exchange Server 2013 CU23 in a virtualized environment.
Android Developer Intern – Rafic Hariri University Hospital Summer 2025
• Built a Doctor's Appointment app in Java covering patient registration, appointment booking, and medical records.

Projects

Green Guardian – Autonomous Garbage-Collection Robot (*Final Year Project*) 2025 – 2026
• Developed an autonomous ROS 2 Jazzy mobile robot for indoor SLAM mapping, localization, obstacle-aware navigation, and garbage collection.
• Integrated Raspberry Pi 5, Arduino Uno, RPLidar A1, GY-91 IMU, encoder-based DC motors, DHB-1 driver, and a 6-DOF arm with gripper.
• Configured slam_toolbox, Nav2, AMCL, DWB, Dijkstra planner, EKF sensor fusion, URDF/Xacro model, TF tree, and scan-based costmaps.
PC and More – eCommerce Store 🌐 2025
• Developed an eCommerce store for PC components with product browsing, shopping cart functionality, customer interface, and backend product management.
• Integrated AI-based features including hardware image recognition, chatbot support, and PC build recommendations to improve product selection.
Smart Home Automation System 2024
• Built an IoT-based smart home system using ESP, Raspberry Pi, MQTT, Blynk, voice control, and a LangChain-powered AI assistant.
Bank Management System 🌐 2023
• Developed a Java OOP banking application to manage customer accounts, deposits, withdrawals, transfers, and transaction records.
Stroke Risk Prediction 2023
• Built a Python machine learning model using TensorFlow to analyze clinical patient data and predict stroke risk.
Car Rental Management System 🌐 C | 🌐 Python 2022
• Developed C and Python car rental systems for viewing available cars, renting and returning vehicles, managing rental records, and displaying vehicle specifications.

Certifications

Advanced Learning Algorithms | DeepLearning.AI | Feb 2025
Supervised Machine Learning: Regression & Classification | DeepLearning.AI | Jan 2025
AI Fundamentals | IBM SkillsBuild | Aug 2024
Intro to Data Science | Cisco | Aug 2024
Python Essentials 1 | Cisco | Aug 2024

Skills

Robotics & Embedded: ROS 2, Nav2, SLAM, Arduino, Raspberry Pi, I²C, MQTT, IoT
Programming: Python, Java, C/C++, TypeScript, SQL, TensorFlow, Keras, scikit-learn, Android (Java)
Systems: Linux, Windows Server, Active Directory, Exchange Server, DHCP/DNS, RAID, Git
Languages: Arabic (Native) English (Fluent)