# Kareem Lababidi

#### **Personal Information:**

Mechatronics Engineer Mobile:(+961)78846238 <u>kareem lababidi@outlook.com</u> Citizenship: Swedish and Lebanese

Date of Birth: 25/11/2001

# **Objective**

I'm a Mechatronics Engineer, graduated from RHU, with a passion for industrial automation, machinery, and control systems. At United Group, I specialize in industrial food packaging machines, working with PLC programming, electrical systems, mechanical components, and troubleshooting automation issues. I have hands-on experience with gears, sensors, actuators, and system control, ensuring optimal machine performance and efficiency. My background also includes diesel generator operations at SACCAL, microcontroller programming and power electronics at EDM, and smart device integration at 3E. Running my international consultancy business, SIC, has further enhanced my leadership, strategic thinking, and financial management skills. I am always eager to apply my expertise to innovative engineering solutions.

### **Education**

### BE IN MECHATRONICS ENGINEERING | CLASS OF 2024 | RAFIK HARIRI UNIVERSITY | LEBANON

- **Key Coursework:** Robotics & Automation, Embedded Systems, Control Systems, Mechanical Design, Artificial Intelligence, Renewable Energy Design, Networking.
- Minor: Psychology
- Related coursework: CCE Workshop, Skills & Abilities

# **Projects**

**AUTONOMOUS BABY FOOT TABLE | FINAL YEAR PROJECT | 2024** 

https://voutube.com/shorts/V5udiVE550E?feature=share

**ROPE-CROSSING ROBOT | SYSTEM DESIGN | 2024** 

https://youtu.be/cOWXYfe51kk

**AUTOMATED PAGE FLIPPER| MECHANIC |2023** 

https://youtu.be/ixh5QURFRbc

AVIATION NETWORK SYSTEM | NETWORKING | 2023

# **Experience**

#### **FULL-TIME | UNITED GROUP | 2025**

Industrial Automation and Control Systems: Programmed and configured PLCs for efficient machine automation, ensuring smooth operation and integration with mechanical and electrical systems.

Electronics and Troubleshooting: Diagnosed, repaired, and maintained industrial electrical and electronic components, optimizing system performance and reliability.

Networking and Communication: Configured industrial networks for seamless data exchange between PLCs, HMIs, and monitoring systems, enabling real-time control and diagnostics.

## FIELD TRAINING | PET SOLUTIONS (Italy) | 2025

- Assembly and wiring of high-performance PET/RPET drying, conveying, and dosing systems used in global packaging operations.
- Electrical panel wiring, motor and sensor integration, ensuring seamless communication between system components.
- Equipment testing and fault diagnosis, identify and resolve electrical and mechanical issues predelivery.
- Adapted quickly to a fast-paced, precision-driven European manufacturing environment, collaborating with skilled international teams.
- Gained hands-on experience in automated plastic processing systems, enhancing technical confidence and system-level understanding.

#### **PART-TIME | 3E | 2024**

Programming and Software Development: Developed and coded programs to integrate smart devices, ensuring smooth communication between hardware components and user interfaces.

Networking and Connectivity: Acquired proficiency in configuring networks to enable seamless communication between IoT devices, cloud platforms, and user applications.

Mobile and Web Application Creation: Designed and developed user-friendly mobile and web applications to allow real-time monitoring and control of smart home systems, enhancing user convenience and functionality.

System Optimization and Troubleshooting: Learned to diagnose and resolve connectivity issues, optimize system performance, and ensure robust and secure operations.

#### INTERNSHIP | SACCAL | SUMMER 2024

- Diesel Generator Operation: Gained a thorough understanding of diesel generator components, working principles, and operational procedures, including start-up, shutdown, and routine maintenance.
- Maintenance and Troubleshooting: Learned to perform regular maintenance tasks, diagnose common issues, and troubleshoot problems to ensure optimal generator performance and reliability.

- Electrical Systems and Safety: Acquired knowledge of electrical systems associated with diesel generators, including wiring, circuit protection, and load management, while adhering to safety protocols and standards.
- Efficiency Optimization: Developed skills in monitoring and optimizing generator efficiency, fuel consumption, and emissions through data analysis and practical adjustments.
- PLC Integration and Automation: Gained hands-on experience programming and configuring PLCs for seamless integration with generator controllers, automating processes to enhance system reliability and performance.

#### INTERNSHIP | EDM | SUMMER 2023

- Microcontroller Programming: Gained hands-on experience in programming microcontrollers using C/C++ and interfacing them with various peripherals, enhancing my understanding of embedded systems design and functionality.
- Algorithm Development and Optimization: Developed and implemented efficient algorithms for data processing and control applications, improving code optimization and resource management in embedded environments.
- Inverter Fundamentals and Control: Acquired knowledge of inverter principles, power electronics, and control strategies like PWM, along with practical skills in testing and troubleshooting inverter circuits for optimal performance.
- Debugging and Troubleshooting: Enhanced debugging skills using tools like oscilloscopes and logic analyzers, leading to improved problem-solving capabilities in both hardware and software contexts.

#### PART-TIME | SIC | 2021 - PRESENT

SIC is a startup online consultancy company for technological advancement.

- Created and manage organizational marketing material and content (Web page, Instagram).
- Recruiting and managing projects team.
- Managing company finances.
- Providing services and operations to international clients online.

#### IT ASSISTANT | CBO IBAD RAHMAN | 2015 - 2018

- Computer Assembly: Manage computers in stock then building and recovering computers for each intended use and the performance required.
- Computer and Server Installation and configuration: Configuring computers to the local system and servers for the local network as well as installing them in the specific scheme.
- Security system Installation: Managing the security system across the buildings and installing the security door pass, elevator pass, and security cameras connected to the data base and power each.
- Electric maintenance: Managing power flow and backup generators and batteries in case of electric cutoffs. Fixing local electric dysfunction and issues.
- General technician (computers, landline, printers, air conditioning, electric by-pass etc.): Employee assistance in case of issues or damage in devices, local and global network, and local phone line.

• Paramedic assistant in Beirut.

### SOCIAL WORKER VOLUNTEER | AL MAKAN | AUGUST 2020-2021

Post Beirut port explosion:

- Identification and collecting data of damages and needs of households affected by the explosion.
- Community service in (Burj Hammoud; Jemayze; Mar Elias; Verdun).
- Surveying individuals for mental and emotional damage in addition to conducting referral activities.

#### **Extracurriculars:**

- Member of **AI Club** Explored machine learning applications in engineering.
- Member of **Music Club** Performed at university events.
- Member of **Debate Club** Developed critical thinking and public speaking skills.
- Member of Astronomy Club Engaged in astrophysics discussions.

#### **Reference Check Contacts**

- Abdullah Soubra
   Engineering Department Manager
   EDM 70 742 199
- Mohammad Darwish |
   Installation, Commissioning and Maintenance Director
   SACCAL Generators | 71 408 108