

# Mina Karam Fahmy

## Contact Information

**Address:** 38, Mohamed Shams St, Ezbet El Nakhl, Cairo  
**Mobile:** +201271172090 **Birth Date:** 07/09/1997  
**E-mail:** [minakaram.me@gmail.com](mailto:minakaram.me@gmail.com) **Sex:** Male  
**LinkedIn:** <https://www.linkedin.com/in/Mina-Karam/>  
**GitHub:** <https://github.com/Mina-Karam/>

## Career Objective

I'm an ambitious man who is looking for challenging in embedded software development and put my knowledge in embedded systems field in automotive industry, I worked on myself and improved my skills individually, a very good quick self-learner.

## Education

- Sep. 2015 - **B.Sc. in Electronics and Communication Engineering, Good (79.3%)**  
Faculty of Engineering, Thebes Academy.
- Aug. 2020 **Graduation Project** (Obesity Kid's Watch)
- The project objective to help kids to solve their problem with childhood obesity by counter moving step, Motivating and tracking their location, temperature and Heartbeat Rate by their parents using Mobile APP or Online Site using IOT Technology.
  - My Main Role: Implementing neo-m6 GPS Module with NodeMCU
  - Grade: **Excellent**

## Courses

- **AUTOSAR Master Class** (Jun 2020 - Aug 2020)
  - ✓ AUTOSAR Layered Architecture
  - ✓ AUTOSAR Tools
  - ✓ Basic Software Deep Dive
    - Communication Stack
    - Memory Stack
    - Diagnostics Stack
    - I/O Stack
  - ✓ RTE & Application
    - Types of Software Components
    - RTE data types
    - RTE Features (Sender/Receiver – Client/ Server – Mode Switch)
    - RTE Configuration
- **Mastering Microcontroller with Embedded Driver Development** (Mar 2020 - Apr 2020)
  - ✓ Interfacing with STM32 (NUCLEO F446RE board) (ARM Cortex M-4)
  - ✓ MCU (Memory map – Bus Interfaces – Clock Tree – Interrupt design - NVIC)
  - ✓ (GPIO – SPI) Driver API Implementations
  - ✓ (I2C – UART – USART) Driver Development
- **Introduction to Real-Time Operating Systems RTOS** (Sep 2019 - Nov 2019)
  - ✓ Embedded SW Dynamic Architecture
  - ✓ Multitasking
  - ✓ Inter-Task (Access/Event) Synchronization
  - ✓ Fixed-Size Memory Management
  - ✓ Software Timers
- **Embedded Systems (AVR Atmega32)** (Jul 2018 - Nov 2018)
  - ✓ ES Concepts
  - ✓ Software design with layer architecture (HAL + MCAL+ Application Layers)
  - ✓ Driver Design and control peripherals as Timers, PWM, I2C, UART, SPI, ADC
  - ✓ RTOS {Real Time Operating Systems}
  - ✓ Interfacing with AVR Atmega32
  - ✓ Automotive Communication Protocols
- **Arduino, Processing, C# Programing and SQL server** (Jul 2017 - Sep 2017)
  - ✓ Doing projects
- **Embedded Systems (Microchip Pic)** (Jun 2016 - Nov 2016)
  - ✓ C Programing / Embedded C
  - ✓ Interfacing with Microchip PIC
  - ✓ How to read Data-Sheet
  - ✓ Implement (GPIO-LCD- Keypad) Driver

## Skills

- **Technical Skills:**
  - ✓ C/C++/Python Programming
  - ✓ Embedded C
  - ✓ Debugging Skills
  - ✓ Microcontroller interface
  - ✓ Data Structure
  - ✓ Device Driver Implementing
  - ✓ Linux Administration
  - ✓ Communications Protocols (UART, SPI, I2C, CAN, LIN)
  - ✓ Real Time Operating Systems
  - ✓ AUTOSAR architecture concepts and methodologies
  - ✓ AUTOSAR Tools
  - ✓ Getting Info. From AUTOSAR pecs
  - ✓ Python scripting
  - ✓ Computer architecture
  - ✓ Embedded Tools
  - ✓ Assembly Language
- **Interpersonal skills:**
  - ✓ Ability to work under pressure
  - ✓ Management skills
  - ✓ Adaptability
  - ✓ Creative Problem solving
  - ✓ Self-motivation
  - ✓ Quick learner
  - ✓ Flexibility
- **Language Skills:**
  - ✓ Arabic: Native
  - ✓ English: Very Good
  - ✓ German: Beginner

## Projects

- **AUTOSAR Project** (Jul 2020 – Aug 2020)
  - ✓ In this project we tried to implement a seat control, divide the application into small SWCs which perform atomic functionalities
  - ✓ Describe SWC needs to RTE by **authoring tool "SAAT"**, port interfaces like Sender/Receiver, Client/Server, Mode Switch
  - ✓ Configure RTE to connect all this SWCs in run time
- **IOT Smart Home** (Jul 2018 – Nov 2018)
  - ✓ Using Keypad for password security
  - ✓ Using passive infrared sensor and Temperature sensor
  - ✓ Fan and Buzzer Control
- **Smart Blind Stick** (Jul 2017 – Sep 2017)
  - ✓ Using Ultrasonic sensor with buzzer by Atmega32
- **Electronic Gate + Point of Sale** (Jul 2017 – Sep 2017)
  - ✓ Using RFID Sensor by Atmega32
  - ✓ Design GUI by C# Programing
- **Function Generator** (Feb 2017 – Mar 2017)
  - ✓ Design PCB to generate (Sine – Square – ramp – Sawtooth – Triangular) Signals
  - ✓ Using AVR With Control switching and Graphical LCD.
- **(Line follower – Remote Controller) Car** (Jul 2016 – Aug 2016)
  - ✓ Using Arduino with motors
  - ✓ Using IR Module
  - ✓ Using Transmitter and Receiver

## Competitions

- **Arab IOT & AI Challenge in Egypt** (Feb 2020 – Present)
  - ✓ Joined with my Graduation project
  - ✓ Reached Semi-Final between 120 teams
- **Robothes Line Follower Challenge** (Jul 2016 – Aug 2016)
  - ✓ Making Line follower car

## Volunteering

- **Team Leader at scout** (Aug 2019 – Present)
- **Squad Leader** (Sep 2016 – Aug 2019)
- **Scout Member** (Sep 2006 – Aug 2016)