Youssef Ahmed Mohamed Kamal

Backend .Net Web Developer

Location: El Obour, Al Qalyubiyah, Egypt   **|**   **Phone:** (+20) 155 577 7997   **|**   **Military Status:** Exempted.
E-Mail: YoussefAhmedMKamal@gmail.com   **|**   LinkedIn: linkedin.com/in/youssefahmedmkamal
GitHub: github.com/YoussefAMKamal   **|**   HackerRank: hackerrank.com/profile/youssefamkamal

Career Objective

Freshly graduated mechatronics engineer, who seeks a role as a junior full stack .net engineer, where I can apply my knowledge within a collaborative team environment. Committed to create efficient and sustainable systems that meet the needs.

Achievements

Earned Problem Solving (Basic) on HackerRank	Mar 2024
Earned Problem Solving (Intermediate) on HackerRank	Jan 2024
Earned Gold level (fifth star) in C programming language on HackerRank.	Dec 2023

Education

Faculty of Engineering Ain Shams University   Sep 2018 - Sep 2023
Bachelor of Mechatronics Engineering.
Courses Taken:

- Intro. to C++ Programming.
- Intro. to Embedded Systems.

Projects

Glove for Deaf GitHub   Dec 2023
- Aimed to simplify communication with deaf people by converting hand gestures to written words.
- Made by using ATMega32 for controlling and flex sensors for identifying the hand gesture.
- Coded on Atmel Studio.
- The project was solely executed by me.

SCADA and IIoT Automation of Industrial Process Control System G.P Drive   Sep 2022 – Jun 2023
- **Grade:** A+.
- The system was an educational kit for teaching different control techniques.
- The target was to operate, fix any problems in the system, and then upgrade the system by adding PLC, SCADA, and IIoT (using NodeMCU "ESP32" and Arduino cloud).

Autonomous Vehicle GitHub   Dec 2022 - Jan 2023
- Aimed to make an autonomous vehicle by using the body of a toy car with a scale of 1:16.
- Used a servo motor for steering and a DC motor for movement.
- NodeMCU (ESP8266) was used for controlling.
- Developed code on Arduino IDE.
- Helped in assembling the vehicle.
- Led the team.
- Completed the first track in 3.5 seconds and completed the second in 9 seconds, it was in the top five in the competition.

On-demand Traffic Light Control [GitHub](#)   Nov 2022
- Made on Atmel studio with ATMega32 microcontroller and simulated on proteus.
- Crossing an active road was the system's priority. When the pedestrian wants to cross the road, he presses a button and then the system stops the cars so that the pedestrian can cross the road safely.
- The project was solely executed by me.

Cartesian CNC Plotter Manipulator Robot   Mar 2022 - Jun 2022
- Participated in making a 3-degree-of-freedom CNC writing robot using two ways:
    - open loop: using three stepper motors only.
    - closed loop: using three DC motors with feedback from encoders.
- Participated in mechanical design using SolidWorks.
- Designed PCB using fritzing and welded it.
- Participated in assembling the entire system.
- Made the GUI using Visual Studio.
- Participated in designing the electrical circuit.

Skills

Technical:
- Boards and Kits: ATMega32, ESP8266 (NodeMCU), ESP32 (NodeMCU), Arduino Uno, Arduino Mega.
- Microcontroller Architecture: AVR.
- Peripherals: DIO, ADC, Interrupt, Timers.
- Communications Protocols: SPI, UART, I2C.
- Tools: Microsoft Office, Atmel Studio, Code Blocks, Visual Studio Basic, VS Code, Eclipse, Git/GitHub, Arduino IDE, Proteus, Fritzing, IAR, Google Colab.
- Programming Languages: C/Embedded C, C#, HTML, CSS, JavaScript, SQL, Python, BAT/CMD.

Soft Skills:
- Problem Solving.
- Attention to Details.
- Teamwork
- Self-Learning

Languages:
- Arabic: Mother Tongue.
- English: Good.

Courses

Full Stack .Net Web Developer, DEPI.	Oct 2024 - Present
Master Embedded Systems Diploma, Learn in Depth.	Feb 2024 – Sep 2024
Embedded Systems Professional Nanodegree Program, Udacity.	Oct 2022 - Dec 2022
Simulink Onramp, MathWorks.	Oct 2022
MATLAB Onramp, MathWorks.	Oct 2022
Embedded Systems Diploma, Amit.	Jul 2022 - Nov 2022
Python for Everybody, University of Michigan (Coursera).	Aug 2022
Introduction to Programming with MATLAB, Vanderbilt University.	Jul 2020