Hanna Samuel
Mechatronics Engineer

CONTACT ME

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EDUCATION

Mechatronics Engineering
Egyptian Chinese University
2017 - 2022

Python and Django Full Stack Web Developer Bootcamp
Online Course
March 2023 - May 2023

SKILLS

- Programming Languages
  - Python, Assembly language, C, C++, C#, Java, HTML, CSS
- Version Control: Git
- PCB design
- Embedded Linux development
- Solidworks & Fluidsim
- Communication Protocols
  - UART, I2C, CAN, USB, Ethernet, Bluetooth, Wi-Fi
- Soft Skills
  - Communication
  - Problem Solving
  - Strategic Planning

WORK EXPERIENCE

Django Full Stack Web Developer
Freelance   May 2023

- Developed and maintained web applications using Django, enhancing functionality and user experience.
- Designed and optimized relational database schemas using PostgreSQL ensuring data integrity and performance.
- Implemented authentication and authorization systems using built-in tools and third-party packages.
- Used Django templates to create responsive and user-friendly interfaces.
- Utilized Git for source code management, collaborating effectively with team members.
- Enhanced application performance through efficient query optimization, caching strategies, and code refactoring.

Penetration Tester - Internship
iSec   July 2022 - October 2022

- Conducted comprehensive vulnerability assessments on web applications and network systems using industry-standard tools.
- Executed manual and automated penetration tests to identify and exploit security weaknesses.
- Created detailed reports on findings, outlining vulnerabilities, potential impacts, and recommendations for remediation.
- Gained hands-on experience with tools like Nmap, Metasploit, Burp Suite, and Wireshark for security testing and analysis.

Heavy Machinery Maintenance Engineer - Internship
Orascom Constructions   July 2021 - August 2021

- Conducted routine inspections and preventive maintenance on heavy machinery to ensure optimal performance and reduce downtime.
- Diagnosed mechanical and electrical issues in equipment, performing necessary repairs and adjustments to restore functionality.
- Maintained detailed records of maintenance activities and repairs, and reported on machinery performance and potential issues to senior engineers.

Automotive Maintenance Engineer - Internship
Amir & Joseph Service center   July 2019 - August 2019

- Conducted routine inspections and maintenance tasks on automotive systems, including engine, transmission, brakes, and suspension components.
- Developed proficiency in diagnosing mechanical and electrical issues using diagnostic tools and troubleshooting techniques.
- Assisted in performing repairs, replacements, and servicing tasks as needed to ensure vehicles meet safety and performance standards.

Internship
Egyptian Chinese University   July 2018 - September 2018

- Engaged in prototyping and developing electronic projects using Arduino microcontrollers, gaining hands-on experience in hardware programming and circuit design.
- Implemented sensor integration with Arduino boards to collect and process real-time data, honing skills in sensor selection, interfacing, and data acquisition techniques.
- Developed proficiency in troubleshooting and debugging Arduino-based projects, identifying and resolving hardware and software issues to ensure project functionality and reliability.

LANGUAGE

Arabic   Native

English   Fluent

French   intermediate