Alaa Soudy

01114435410 | Alaa.Soudy1979@helwan.edu.eg
alaa-soudy | AlaaSoudy
Giza, Egypt

Objective

Communication and Electronics Engineering student (Helwan University), ICPC Community participant, and frontend web developer (C++, HTML, CSS, JavaScript, React.js). Exploring applications of machine learning and AI in communications and engineering; keen to bridge practical engineering with modern software development.

Education

- **Helwan University — Faculty of Engineering** *2023 – Present*
  B.Sc. in Communication and Electronics Engineering Giza, Egypt
  - Relevant topics: Communication Systems, Analog Modulation (AM/DSB-SC), Transmission Media, Data Structures (C++), Python Basics

Projects

- **Fresh Cart — E-Commerce Web App** *2024*
  Tools: React.js, React Router DOM, Axios, Bootstrap [🌐]
  - Built a responsive shopping experience with component-based UI and smooth client-side routing.
  - Integrated API calls for product browsing and dynamic content.
- **Fokir – Personal Portfolio Website (based on Fokir Template)** *2023*
  Tools: HTML, CSS, JavaScript [GitHub]
  - Implemented a clean one-page portfolio with sections for services, work, and contact.
  - Practiced responsive layout and basic animations.
- **Bakery — Responsive Landing Website** *2023*
  Tools: HTML, CSS [GitHub]
  - Designed a static landing page highlighting products, gallery, and contact details.
  - Focused on typography, layout grids, and mobile responsiveness.
- **AM Radio Receiver (Academic Project)** *2024*
  Tools: Analog circuits, lab instrumentation
  - Implemented AM signal reception chain (tuning, detection basics) as part of analog communication practice.
  - Documented observations and performance trade-offs.
- **Audio Amplifier (Academic Project)** *2024*
  Tools: Analog electronics
  - Built and tested a basic audio amplifier; examined gain, distortion, and bandwidth considerations.
  - Compared measured vs. expected performance.
- **Practical Electronics & Embedded Systems Training – Helwan University** *2024*
  Tools: Proteus, PCB Design, ATmega32, Keypad, LCD, Atmel Studio
  - Designed, simulated, and built electronics and embedded systems from concept to PCB fabrication.
  - Developed ATmega32 systems with keypad–LCD interface, contrast/brightness control, and hardware reset.
  - **Key Projects:** Adjustable Power Supply, Traffic Light Controller, Ring Counter, BCD Adder, Lighting Timer, Digital Voltmeter .

Skills

- **Programming:** C++, Python (basics), HTML, CSS, JavaScript
- **Web:** React.js, Bootstrap, REST APIs
- **ECE Topics:** Analog communication (AM/DSB-SC basics), Transmission media, Digital logic fundamentals
- **Tools:** Git, GitHub, VS Code
- **Languages:** Arabic (Native), English (Full Professional), French (Limited Working), German (Elementary)
- **Interests:** Exploring ML/AI for communications, Frontend development, Problem solving

Certifications

- **MaharaTech - ITIMooca**, Python Programming Basics *2024*
- **MaharaTech - ITIMooca**, Object-Oriented Programming *2024*
- **Coursera**, Machine Learning Specialization (Financial Aid Applicant) *2024*
- **MathWorks**, MATLAB Onramp *2024*