Ahmed Hossam

01129275511 | shokrfy@gmail.com | linkedin.com/shokrfy | github.com/shokrfy

Education

Tanta Higher Institute of Engineering and Technology   Tanta, Gharbia
Department of Communication and Computer Engineering   *Oct. 2020 { Jun 2025*

Experience

Graduation Project: Smart Glove Assistant for Deaf and Mute People   Oct. 2024 – Present
Flutter, ESP32, BLE, Firebase, TTS/STT APIs
- Designed and implemented a wearable smart glove that translates sign language gestures into speech.
- Used ESP32 with flex sensors and MPU-6050 to detect gestures and send data over BLE.
- Developed a Flutter mobile app to convert gestures to audio using Google Text-to-Speech, and Speech-to-Text.

Summer Training – CCNA Routing and Switching   Jul. 2024 – Sep 2024
Telecom Egypt (WE)
- Learned the basics of computer networking including OSI model, IP addressing, subnetting, and routing protocols.
- Practiced configuring routers and switches using Cisco Packet Tracer.
- Gained practical understanding of LAN/WAN technologies and network troubleshooting.

Summer Training – Web Development with Python   Jul. 2023 – Sep 2023
Information Technology Institute (ITI), Ministry of Communications
- Completed intensive training in full-stack web development using Python and Django framework.
- Built interactive web pages using HTML, CSS, and JavaScript.
- Designed and implemented dynamic websites with Django and connected them to MySQL databases.
- Practiced real-world tasks such as form handling, user authentication, and CRUD operations.

Projects

Smart Glove Mobile App | *Flutter, BLE, Firebase, Google TTS/STT*   Oct. 2024 – Jun 2025
- Developed a Flutter mobile app to communicate with a smart glove via Bluetooth Low Energy (BLE).
- Integrated Google Text-to-Speech to convert gestures into spoken words and Speech-to-Text for live captioning.
- Handled real-time data processing from ESP32 microcontroller using custom BLE protocol.

Network Design Simulation Project | *Cisco Packet Tracer, CCNA*   Jul. 2024 – Sep 2024
- Simulated a complete small business network including routers, switches, PCs, and servers.
- Configured static and dynamic routing protocols (RIP, OSPF), VLANs, and NAT.
- Tested connectivity using ping and traceroute, and debugged IP addressing issues.

E-commerce Website Backend | *Python, Django, HTML, CSS, JS, MySQL*   Jul. 2023 – Sep 2023
- Built a full-stack e-commerce web application with user registration, product catalog, and cart system.
- Implemented user authentication, form validation, and data handling using Django.
- Connected frontend with backend using Django templates and served dynamic content from MySQL database.

Technical Skills

Programming Languages: Python, C/C++, Dart, JavaScript, HTML, CSS, SQL
Frameworks & Tools: Flutter, Django, Firebase, Git, MySQL, Arduino IDE
Embedded Systems: ESP32, Bluetooth Low Energy (BLE), Flex Sensors, MPU-6050
Networking & Simulation: CCNA, Cisco Packet Tracer, IP Routing, VLAN, NAT
Software & Platforms: VS Code, Proteus, MATLAB, Fritzing, GitHub, Firebase Console

Certifications

CCNA Routing and Switching v6-(200-301) — Telecom Egypt (WE), 2024

Web Development with Python Certificate — ITI, Ministry of Communications, 2023

Languages

Arabic: Native proficiency
English: Professional working proficiency (reading, writing, and speaking)