# **Hussein Moussa**

# **Computer and Communication Engineer**

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Open to Relocate LinkedIn

M.Sc. candidate in Computer and Communication Engineering with a strong foundation in Python development, machine learning, and IoT systems.

Experienced in building predictive models, data pipelines, and embedded solutions using various sensors and wireless communication technologies.

Skilled in frameworks such as Django, TensorFlow, and Scikit-Learn, with hands-on experience developing Al-driven applications and assistive wearable devices.

Recognized for academic excellence and passionate about delivering innovative, real-world technology solutions that bridge software intelligence with communication systems.

### Experience —

**Machine Learning Intern** • Elevvo Pathways • Cairo, Egypt (Remote)

Aug '25 – Sep '25

Applied machine learning techniques to build predictive models, optimize performance, and deliver actionable insights from real-world datasets. Key Contributions:

- Built and evaluated predictive models (regression, classification, clustering, recommendation systems, and CNNs) using Python, Pandas, NumPy, scikit-learn, TensorFlow, and Keras.
- Collected, cleaned, and preprocessed raw datasets (Kaggle/UCI) to design robust ML pipelines.
- Applied feature engineering and optimization techniques (hyperparameter tuning, regularization, SMOTE) to boost accuracy and reduce overfitting.
- Conducted exploratory data analysis (EDA) to uncover patterns, correlations, and anomalies.
- Visualized results with Matplotlib/Seaborn and communicated actionable insights to the team.

**Python Development Intern** • Codveda Technologies • India (Remote)

Jul '25 – Aug '25

Completed a structured Python internship, building practical projects and mini applications:

- Developed Python scripts and mini projects using variables, loops, conditionals, functions, and data structures.
- Applied file handling, exception handling, and web scraping for real-world data processing.
- Built modular and reusable code using object-oriented programming (OOP) principles.
- Solved algorithmic challenges and strengthened problem-solving, debugging, and automation skills.
- Completed all assigned tasks, demonstrating progressive mastery of Python development.

#### **Education** -

**Lebanese International University**, Saida, Lebanon | Master of Science Computer and Communication Engineering

Sep '25 – Present

**Lebanese International University**, Nabatieh, Lebanon | Bachelor of Science Communication Engineering GPA: 3.74

Oct '21 - May '25

- Achieved Dean's Honor List recognition in 2023, 2024, and 2025 for outstanding academic performance.
- Participated in hands-on projects and labs, applying theoretical concepts to real-world engineering problems.

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**Backend Development with PHP | YouBee.ai** 

**Introduction to IoT and Digital Transformation | Cisco** 

**Building Websites with HTML | YouBee.ai** 

Mastering Design with CSS | YouBee.ai

Interactive Websites with JavaScript | YouBee.ai

Python Development | Codveda Technologies

Machine Learning | Elevvo Pathways

## Projects —

My Django Blog Aug '25

- Developed a Diango- based blog application with authentication and CRUD functionality.
- Implemented user registration, login, logout and profile management.
- Enabled blog post creation, editing, and deletion features.
- Designed responsive front-end templates using Django's template engine.
- Integrated SQLite as the backend database for data storage and retrieval.

#### **Sign Language Translator Glove**

Feb '25 - May '25

- Developed a wearable system to assist individuals with hearing or speech impairments by translating hand gestures into text.
- Integrated flex sensors into a glove to detect finger movements corresponding to specific gestures.
- Utilized an Arduino microcontroller to process sensor data and transmit it wirelessly via Bluetooth.
- Built an Android application to receive and display translated text in real time.
- Engineered the system for portability, accuracy, and low latency using affordable components.
- Demonstrated the potential of accessible assistive technology through a cost-effective and user-friendly design.

#### Skills —

Top Skills: Seaborn, Matplotlib, NumPy, Pandas, Keras, Scikit-Learn, Machine Learning, Data Preprocessing & Feature Engineering, Exploratory Data Analysis (EDA), TensorFlow, Python programming, Object-Oriented Programming (OOP), Web Scraping, Data Structures & Algorithms, Problem Solving & Debugging, Django, Python (Programming Language), Web Development, SQL/SQlite, Authentication & Authorization, MySQL, Session & Cookie Management, HTML, Cascading Style Sheets (CSS), JavaScript, Front-End Development, Digital Transformation, Networking Basics, IT fundamentals, Smart Devices, Automation, Cisco Networking, Internet of Things (IoT), Embedded Systems, Arduino IDE, Circuit Design, Project Management, C (Programming Language), Web Engineering, Hardware Engineering, Networking, Mobile Application Development, Microcontrollers, PHP, Engineering, Computer Engineering Languages: Arabic, English, French