

Abdallah Waleed Kamal Mousa Salem

Internet of Things & Big Data analysis

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Profile:

I am an ambitious and detail-oriented student specializing in Internet of Things (IoT) and Big Data Analytics, with a strong foundation in .NET development. My passion lies in creating smart, data-driven applications that seamlessly connect devices, extract valuable insights, and deliver impactful solutions. I am constantly striving to enhance my technical expertise, combining analytical thinking with practical implementation to build innovative systems that address real-world challenges.

Education:

(2023-2027): Faculty of Computers & Artificial Intelligence, Menoufia National University (MNU)

Specialization: Internet of Things (IoT) & Big Data Analysis

Internships:

DotNet Stack

(Aug,2025-Present)

Information Technology Institute (ITI)

- Learned Object-Oriented Programming with C#, advanced C# features, source control (Git), and Agile methodologies.
- Gained knowledge in HTML, CSS, client-side development with JavaScript and Bootstrap, and database fundamentals.
- Acquired skills in ASP.NET Core MVC, Web API, SQL Server, LINQ, Entity Framework, Material UI, and React.js.
- Completed real-world projects applying full-stack .NET solutions, integrated Agile practices, and solved coding challenges on HackerRank/LeetCode.

Fortinet Cyber Security Engineer

(Jun,2025 – Present)

Digital Egypt Pioneers, Menoufia Branch

- Led a Capstone Project applying IoT, Big Data, and Cybersecurity in a real-world scenario.
- Studied Cisco CCNA (200-301): network setup, troubleshooting, and LAN/WAN.
- Certified in Fortinet FCP – FortiGate 7.4: firewall, VPN, and network security configuration.
- Certified in Fortinet FCP – FortiManager 7.4: centralized network automation.

IoT Applications Engineer

(Sep,2024 – Oct,2024)

National Telecommunication Institute (NTI)

- Programming: Python
- IoT: Basic device integration, protocols, and concepts
- Cybersecurity: Network Security, Cyber defense
- Embedded Systems: Arduino, sensors, embedded IoT apps
- Freelancing: IT support, data entry, Python automation (Upwork/Fiverr)

IoT Applications Developer

(Aug,2024 – Sep,2024)

Information Technology Institute (ITI)

- Databases: Relational DBs, SQL queries, and design principles
- IoT Value Chain: Knowledge of device, communication, data & app layers
- IoT Development: Built simple hardware–software integrated IoT apps
- Hands-On Labs: Worked with Arduino, sensors, Bluetooth/NRF modules, actuators

Certificates:

- CCNA-Introduction to Networks Certificate – Cisco Networking Academy **(Aug,2025)**
- Internet of Things (IoT) Applications – National Telecommunication Institute (NTI) **(Oct,2024)**
- IoT Applications Developer – Information Technology Institute (ITI) **(Sep,2024)**
- Python Essentials 1 – Cisco Networking Academy **(Oct,2024)**
- Develop Custom Events & Plugins in MOT – MaharaTech (ITI Mooc) **(Aug,2024)**
- Cisco Certified Network Associate (CCNA) - Networking – MaharaTech (ITI Mooc) **(May,2024)**
- Cisco Certified Network Associate Security (CCNA Security) – MaharaTech (ITI Mooc) **(May,2024)**
- Introduction to Network Security – MaharaTech (ITI Mooc) **(July,2024)**
- Computer Network Fundamentals – MaharaTech (ITI Mooc) **(January,2024)**

Skills:

- **Technical Skills:**

- Programming Languages: Python (Intermediate), Java (Beginner), C++ (Beginner)
- Software Dev: OOP(Intermediate), software engineering basics (Beginner)
- IoT: Arduino, Sensors (Intermediate), IoT app development (Beginner)
- Database: SQL basics (Beginner), database fundamentals (Beginner)
- Cybersecurity: Network security (Beginner), Fortinet firewall basics (Beginner)
- **Language Skills:**
 - Arabic: Native
 - English: Very Good
 - French: Very Good

Projects:

- **Bluetooth – Controlled Robot:**
 - **Description:** Improved command response by 35%, reaching <500 ms latency and 95% control accuracy and Enabled stable wireless communication within 10 m range using Bluetooth (HC-05) and Enhanced object detection by 100% coverage in 10–150 cm range through sensor calibration.
 - **Tools:** Arduino Uno, HC-05, Ultrasonic sensor, L298N, DC motors, Arduino IDE, mobile
 - **Github:** [Bluetooth Robot Project](#)
- **Smart E-Commerce Behavior Analytics Project:**
 - **Description:** Processed 995K+ user events with PySpark, improving scalability by 30% via parallel ETL and Achieved 96.7% model accuracy using XGBoost for predicting customer behavior and Reduced data pipeline runtime by 30%, and improved insight extraction efficiency by 40%.
 - **Tools:** PySpark, Spark, Pandas, Seaborn, Matplotlib, XGBoost, Scikit-learn, Jupyter.
 - **Github:** [Ecommerce Behavior Dataset Project](#)

Extracurricular Activities:

- **Team Leader – Digital Egypt Pioneers 2025**
Led a team of 23 students in a national-level digital innovation program and Organized 1 technical workshops and managed project deadlines and Developed leadership, communication, and project management skills.
- **Team Leader – masterofcoding | ORCA Programming Competition 2025**
Led a 3-member team to **1st place** among 18 teams in a national Python programming and competition organized by ORCA and Assigned roles, managed code structure, and ensured timely task completion and Demonstrated strong leadership, teamwork, and problem-solving skills under time constraints.
- **Team Leader – .NET Stack | Information Technology Institute (ITI), 2025**
As the Team Leader for the .NET Stack at ITI in 2025, I was responsible for guiding and coordinating a group of 27 students. I ensured smooth collaboration, delegated tasks effectively, and supported the team in achieving both technical and project goals. My role also involved fostering communication between students and instructors, encouraging peer-to-peer learning, and creating an environment that strengthened both technical expertise and teamwork skills.