Youssef Guirat

Final-year Computer Science Engineering Student

Nabeul, Tunisia | P: 29810029 | guirat.youssef12345@gmail.com

SUMMARY

Final-year Computer Science Engineering student passionate about innovation and analytical precision, with hands-on project experience in AI, mobile, web, and IoT development. Skilled in building innovative and efficient software solutions through the integration of AI models and modern frameworks. Eager to apply technology creatively to deliver impactful and scalable solutions across diverse domains, including AI, FinTech, healthcare, and IoT.

EDUCATION

National School of Computer Science Manouba	Engineering Cycle 2024–2025
Higher Institute of Computer Science Ariana	Master's Degree in Computer Science 2023–2024
Higher Institute of Technological Studies of Nabeul, Nabeul	Applied License in Information Technology 2020–2023

WORK EXPERIENCE

Asteelflash, Soukra, Tunis   Jul 2025 – Sep 2025

Designed and developed a centralized web application for optimizing configuration management and production operations. Built REST APIs with ASP.NET Core and SQL Server, implementing Clean Architecture for scalability, and developed the frontend with JavaScript and Bootstrap.

As2e, Soukra, Tunis   Feb 2023 – May 2023

Developed an IoT control system that collected data from solar panels and wind turbines using ESP32, Grafana, Flutter, and Firebase for real-time visualization; backend with Node-RED and InfluxDB.

Sagemcom, Borj Ghorbel, Tunis   Jan 2022 – Feb 2022

Developed a GUI with Java to centralize product testing during the Speed Port Pro Plus production process.

Arabsoft, Tunis   Jun 2021 – Jul 2021

Developed a clone of a specific purchase module functionality using Java and Oracle Database.

PROJECTS

• Developed a mobile application for early Alzheimer's detection using Flutter, TensorFlow (VGG16 transfer learning), and Flask API.

• Built an IoT temperature control system (Raspberry Pi 3, NodeMCU, MySQL).

• Created Android applications: a to-do list with Firebase and a localization app.

• Developed Arduino-based systems: gesture control with Python, radar using DC motor and ultrasonic sensor, and temperature monitoring using DHT sensor and ThingSpeak.

TECHNICAL SKILLS

• **Programming Languages:** Python, Java, C, Embedded C, PHP, JavaScript, VHDL, C#
• **AI / ML Frameworks:** TensorFlow, Scikit-learn, Pandas, NumPy
• **Mobile Development:** Android, Flutter
• **Databases:** MySQL, Firebase, SQLite, Oracle, MongoDB, InfluxDB, SQL Server
• **Hardware & IoT:** Arduino, Raspberry Pi, ESP32, PIC16F877, PCB Design
• **Tools & Platforms:** Git, Docker (basic), VS Code, Linux, Node-RED, Grafana, .NET

LANGUAGES

Arabic (C2) | English (C1) | French (B2) | Spanish (A1)

CERTIFICATIONS & ACTIVITIES

• Member in Association Robotique ENSI (2024–2025)
• Participation in Industry 4.0 Hackathon (2023)
• Artificial Intelligence Certified Training – Orange Digital Center (2022)

- Protocole Manager – Orange Tech Club ISET Nabeul (2020–2023)
- Sponsorship Member – Tunivision Club ISET Nabeul (2020–2022)
- Youth of Science Foundation – IoT Scientific Camp (2018)