Mahmoud Mansouri

Software engineer and Master's student in cybersecurity. Tunisia.

mahmoudmansouri2001@gmail.com github.com/MahmoudMans linkedin.com/in/mahmoud-mansouri-6548b41b6

Profile

I am a software engineer and a Master's student in Cybersecurity at Université Internationale de Tunis (UIT). I am currently a cybersecurity intern at NoBreach, building on experience in both software development and security. My interests are software security, vulnerability discovery, systems security and AI-assisted cybersecurity. I am looking for a research internship or a Master's thesis as a pathway toward a PhD in cybersecurity, and I am also open to building web and mobile apps for teams and businesses that need one. Outside work and study, I co-organize Google Developer Groups Carthage, where I help run DevFest, Google I/O Extended and International Women's Day events. I am also a certified AWS Cloud Practitioner and Professional Scrum Master.

Experience

Cybersecurity Intern at NoBreach, Tunisia — May 2026 – Present

Research Intern at Mediterranean Institute of Technology, Tunisia — Jan 2024 – Jun 2024

Intern at Tourisfair, Remote, Germany — Jul 2023 – Aug 2023

Intern at Sopra HR Software, Tunisia — Jul 2022 – Aug 2022

Intern at Gomycode, Tunisia — Aug 2021 – Sep 2021

Intern at Ulysse Hyper Distribution, Tunisia — Jul 2021 – Aug 2021

Part-time Web and Game Instructor at Gomycode, Tunisia — May 2021 – Sep 2021

Intern at PricewaterhouseCoopers, Tunisia — Jul 2020 – Aug 2020

Education

Master's degree in Cybersecurity — Sep 2025 – Present
Université Internationale de Tunis (UIT), Tunisia

Software Engineering — Sep 2019 – Jun 2024
Mediterranean Institute of Technology, Tunisia

French Baccalaureate — Sep 2016 – Jun 2019
Gustave Flaubert High School, Tunisia

Personal projects

FinCrime Graph
A full-stack AML investigation platform for financial-crime analysts. Rules raise alerts on transactions, a Neo4j graph reveals circular flows and hidden links, and every case moves through evidence, review, decision and release steps with a tamper-evident audit trail. Built with Java, Spring Boot, Spring Security, PostgreSQL, Neo4j, Next.js, React, TypeScript.

Infra Sentinel
Open-source, self-hosted monitoring. It checks websites, APIs, ports, DNS and certificates, a Go agent reports from servers, and when something fails it opens an incident and tells the right person by email, chat or webhook. It also publishes status pages and SLA reports, with one PostgreSQL database running everything. Built with TypeScript, NestJS, Next.js, React, PostgreSQL, Go, Tailwind CSS, Playwright.

BuildFlow
A multi-tenant project management app for construction companies, built from the database to the interface: five role-based views, a change-order impact preview, a phone-first site report with draft saving and photo shrinking, and more than 100 backend tests against a real PostgreSQL. Built with Java, Spring Boot, PostgreSQL, MinIO, Next.js, React, TypeScript, Docker.

BuildSight
A full-stack construction project-controls platform with 126 routes covering portfolio forecasting, recovery planning, governance, document control and risk. Recovery options are costed net of the time-related savings of the days they

recover, and a Playwright audit checks every route at desktop and phone width. Built with Java, Spring Boot, PostgreSQL, Flyway, Next.js, React, TypeScript, Playwright.

ProcureIQ
A full-stack procurement platform built with Spring Boot and Next.js: 215 screens over 278 database tables, covering requests, approvals, sourcing, purchase orders, deliveries, invoices, supplier risk and strategy. Suppliers work in a separate portal, isolated in the API so that one supplier never sees another's quotations or orders. Built with Java, Spring Boot, PostgreSQL, Flyway, Next.js, React, TypeScript.

TenderPilot
A full-stack platform for bid teams that brings tenders from TED, BOAMP and DECP into one model, explains how well each one fits the company, and runs the bid from the Go / No-Go decision to submission. An optional local AI reads the bid documents without them ever leaving the machine, and it never makes the decision. Built with Java, Spring Boot, PostgreSQL, OpenSearch, Liquibase, Ollama, Next.js, React, TypeScript, Tailwind CSS.

TerraScope
A full-stack platform built with Spring Boot and Next.js that watches live USGS and NASA EONET hazard feeds, raises alerts against location-based rules and pushes them to the browser in real time. Incidents are run in a Situation Room with actions, resources, evacuation, lifelines and damage, and governance records can be verified offline. Built with Java, Spring Boot, PostgreSQL, Flyway, Next.js, React, TypeScript, Leaflet, Docker.

VentureScope
A full-stack Next.js app for startup financial planning. One deterministic engine turns a founder's assumptions into monthly forecasts, cash runway, scenario comparisons and reports, and a team then compares real results with the plan, closes finished months, asks for approvals and prepares a board pack. The rules that protect the history live in the database itself. Built with Next.js, React, TypeScript, Tailwind CSS, Prisma, PostgreSQL, Auth.js, Recharts, Vitest, Playwright.

Legal Doc Analyzer
A Next.js web app with a NestJS server for a first reading of a contract. The server reads the text, asks an AI service for the clauses that matter most and keeps only the clauses whose quote it can find in the document. Analyses are saved as JSON files and can be searched, opened, questioned and deleted. Built with Next.js, React, TypeScript, Tailwind CSS, NestJS, pdf.js, Ollama, Jest.

LMS Academy
A full-stack learning management system with a Next.js web app and a NestJS API over PostgreSQL. Academies build courses from modules and video lessons, add quizzes and a final project, and sell courses and digital products in Tunisian dinars. Three roles are checked on every request, and each academy only reaches its own data. Built with Next.js, React, TypeScript, Tailwind CSS, NestJS, PostgreSQL, Prisma, Jest.

Neighbor Node
A Next.js and TypeScript web app with a small command-line tool. Posts are edited through a private link instead of an account, every rule the browser checks is checked again on the server, and posts are saved to one JSON file that cannot break halfway. An early version, with no accounts and no database. Built with Next.js, React, TypeScript, Tailwind CSS, Node.js, Vitest.

University Scheduler
Three projects that work together: a Next.js admin website, a NestJS REST API over PostgreSQL that checks every change, and a Python solver built on Google OR-Tools CP-SAT that returns a day, a time and a room for each class it can place. Built with Next.js, React, TypeScript, Tailwind CSS, NestJS, Prisma, PostgreSQL, Python, FastAPI, OR-Tools.

Economofar
A SwiftUI iPhone app with a Spring Boot API and PostgreSQL. The API keeps each receipt photo and asks a vision model that runs locally to read it, and every screen builds on the items, prices and shops it returns. The interface is in French, with light and dark themes. Built with Swift, SwiftUI, Java, Spring Boot, PostgreSQL, Ollama, Docker.

MaidMatch
A Next.js booking site, a Next.js admin dashboard and a NestJS API with PostgreSQL. The API checks every booking, computes the price, refuses staff who are on leave or already busy, keeps recurring jobs at the same Paris time across clock changes, and pushes new bookings to the admins live. The interface is in French, and the site is clearly marked as a demonstration. Built with Next.js, React, TypeScript, Tailwind CSS, Zustand, NestJS, Prisma, PostgreSQL, Socket.io.

AI-based antivirus
An AI-based antivirus system that analyzes executable file features to detect malware, leveraging machine learning for accurate identification. Built with Python, scikit-learn, NumPy, Pandas, C++, Qt.

Program Management System
This software streamlines scheduling, room bookings and tuition tracking while enabling seamless communication through mobile and web apps. Built with React, Node.js, MongoDB, React Native.

Self-Learn ODC Platform
An online platform with roles for managers, coaches and participants. It provides a training calendar, enrollment management, attendance tracking and post-training evaluations to improve future sessions. Built with React, Node.js, MongoDB.

Certifications

CCNA: Introduction to Networks, Cisco Networking Academy — Nov 2026

Professional Scrum Master I (PSM I), Scrum.org — Nov 2025

AWS Certified Cloud Practitioner, Amazon Web Services — Jan 2024

TensorFlow Developer Certificate, Google

Google Solution Challenge 2024, Google — May 2024

Cloud Digital Leader learning path, Google Cloud — Aug 2024

The Arcade, September 2024, Google Cloud Skills Boost — Sep 2024

Community

Co-organizer, Google Developer Groups Carthage — Since January 2024

Local tech lead, Tunis stop, Daytona Developers Club Tour '24 — October 2024

Technical Activities Manager, Metaverse Tunisian Summit 2.0, IEEE — 2024

Technical lead, then lead and mentor, Google Developer Student Clubs SMU — From 2021

Skills

Programming languages: C, C++, C#, Java, Python, JavaScript, TypeScript, Go, PHP
Libraries and frameworks: Spring Boot, Next.js, NestJS, Node.js, React, React Native, Angular, Vue
Data analysis: Pandas, NumPy, scikit-learn, NLTK, Seaborn, TensorFlow
Databases: MySQL, PostgreSQL, MongoDB, Firebase, Cassandra
Other technologies: Linux, Docker, Kubernetes, Virtual machines, AWS, Google Cloud
Languages: Arabic (Native), French (Native), English (Fluent)