Aya Squalli Houssaini

https://ayasqualli.github.io
+212 617 799137
Aya.HOUSSAINI@um6p.ma
www.linkedin.com/in/aya-squalli-houssaini

SCAN ME

Experience

Headstarter Fellowship
SOFTWARE ENGINEERING FELLOW
July 2024 - September 2024

- Built and deployed 5 AI-powered web apps in 5 weeks using React, Next.js, Firebase, Clerk, and Vercel via agile sprints and CI/CD.
- Co-developed a technical support chatbot (Next.js + Gemini API) with a 3-person team.
- Created a SaaS flashcard generator (200+ cards/session) with Stripe paywall and tiered pricing.
- Engineered a RAG-based academic Q&A system using Pinecone, OpenAI GPT-3.5-turbo, and a mock database of 100+ professor reviews.
- Scaled all apps to 50–100+ users, iterating weekly on live feedback for UX and performance.
- Received mentorship from engineers at Google, YC, Stanford, Amazon, and VC-backed startups.
- Finalist in the Rilla Sales Transcripts Hackathon

3DSMART FACTORY
SUMMER INTERN
JULY 2025 – SEPTEMBER 2025

- Researched and prototyped a Federated Learning–based Intrusion Detection System (FL-IDS) for IoT networks.
- Designed a privacy-preserving architecture enabling edge devices to collaboratively train anomaly detection models without sharing raw traffic data.
- Achieved >92% detection accuracy on real-world dataset (N-BaIoT dataset) while reducing central server load

1337 CODING BOOTCAMP
PARTICIPANT
COMPLETED: APRIL 2024

Completed intensive 5-weekend bootcamp in Python for data science, strengthening practical coding and analytical skills

MCPC PROGRAMMING CONTEST
VOLUNTEER ORGANIZER & VOLUNTEER LEAD
MARCH 2024 & SEPTEMBER 2025

- Served as Volunteer Lead for Morocco's premier national programming contest (MCPC) qualifiers for the ACPC, overseeing 30+ volunteers across two editions.
- Spearheaded end-to-end logistics: managed participant registration (150+ contestants), coordinated contest floor and balloon room ushers,, oversaw crowd and movement control as well as printing tasks.

CAPTURE THE FLAG (CTF) COMPETITIONS

- **HackTheBox Global Meetup:** 1st Place (Ambassador Track)
- **MCSC CTF @ ENSIAS** : Competed in national cyber defense challenge (ranked 28th nationally)
- **HackTheBox Meetup with 1337 campuses, 42 Berlin, 42 Wolfsburg and 42 Heilbronn** : Secured 5th place (solved 6/7 problems in team of 3)
- **Kaspersky CTF**: Ranked 38th/450 regionally (Middle East, Türkiye and Africa)

Skills

- **Programming:** Python, C, C++ , JavaScript, SQL
- **Web Development:** React, Next.js, Nuxt.js, Vue.js (Beginner), HTML5/CSS
- **Cybersecurity & CTF:** Cryptography, Reverse Engineering, Web Exploitation, Forensics,

Education

COLLEGE OF COMPUTING – UM6P
STATE ENGINEER IN COMPUTER SCIENCE / CYBERSECURITY MINOR (BAC +5, MASTERS' EQUIVALENT)
EXPECTED GRADUATION: 2029

- **ACM Chapter Member:** Actively participated in the Association for Computing Machinery (ACM) chapter as a membership chair, contributing to events and workshops

Certifications

CS50X: INTRODUCTION TO COMPUTER SCIENCE
Harvard University, edX
COMPLETED: JULY 2024