

## Education

**Philipps-Universität Marburg, Germany**  
Exchange Student, MSc in Computer Science

*Sep 2024 – Present*

**ESPRIT, Tunisia**  
Master's in Computer Science

*Sep 2022 – Present*

**ISSAT, Tunisia**  
Integrated Engineering Preparatory Cycle (Mathematics, Physics, Computer Science)

*Sep 2020 – Jun 2022*

## Internships

**Software Engineer Intern – Bharcom / Agricultural Union**

*Jan 2025 – Present*

- Contributing to the development of a digital platform for agricultural services and farmer management
- Developing backend services using Spring Boot and RESTful APIs
- Implementing secure authentication and role-based access control (RBAC)
- Integrating real-time notifications and data updates using WebSocket communication
- Managing scalable data storage with MongoDB and optimizing query performance
- Assisting in system monitoring and performance analysis in production environments

**Software Engineer Intern – NextStep IT**

*Jun 2024 – Sep 2024*

- Developed a microservices-based ticketing system using Spring Boot and React
- Optimized RESTful APIs, reducing average response time by 35%
- Implemented real-time notifications using WebSocket and Server-Sent Events (SSE)
- Built CI/CD pipelines with Jenkins and Docker for automated deployments
- Integrated Active Directory authentication with SSO and role-based authorization
- Improved backend scalability to handle 100+ concurrent users using caching and load balancing

**Software Engineer Intern – Aetech-Solutions**

*Jun 2023 – Aug 2023*

- Developed a scalable inventory management system using Spring Boot and PostgreSQL
- Optimized SQL queries, reducing data retrieval time by 40%
- Designed and secured RESTful APIs with JWT-based authentication
- Implemented Redis caching to improve application performance
- Wrote automated backend tests using JUnit and Mockito

## Projects

**YEFFA – Scalable E-Learning Platform (Angular, Spring Boot, MongoDB)**

*2025 – Present*

- Designed and developed a modular full-stack e-learning platform using Angular and Spring Boot
- Implemented secure authentication with JWT, refresh tokens, Google OAuth2, and role-based access control
- Built course management features including enrollment, progress tracking, and certificate generation
- Developed real-time features such as notifications, social interactions, and live updates using STOMP WebSockets
- Created an admin dashboard with guarded routes for managing users, courses, and content
- Implemented CI/CD pipelines with Docker, Jenkins, SonarQube quality gates, and monitored system performance using Prometheus and Grafana

**VitaNova (Angular, Spring Boot, MySQL)**

*2024*

- Developed an AI-driven e-commerce platform based on a microservices architecture
- Designed and optimized REST APIs for backend communication
- Implemented real-time inventory synchronization using WebSocket
- Integrated authentication and authorization using JWT and OAuth2

**Chat Application (Spring Boot, Angular, WebSocket)**

*2024*

- Developed a full-stack real-time chat application using Spring Boot and Angular
- Implemented WebSocket-based messaging and notification services
- Secured user sessions using JWT-based authentication and authorization
- Integrated Google Natural Language API for message sentiment analysis
- Designed a scalable backend architecture suitable for cloud deployment

## Skills

**Backend:** Spring Boot, Node.js, Express.js, Django, Symfony, REST APIs, GraphQL

**Programming Languages:** Java, TypeScript, JavaScript, Python

**Databases:** PostgreSQL, MongoDB, MySQL, Redis, Firebase

**DevOps & Cloud:** Docker, Jenkins, Git, AWS, Kubernetes

**Testing:** JUnit, Mockito, Jest, Cypress

**Frontend:** Angular, React, HTML5, CSS3, Tailwind, Material UI

## Languages

**English:** Fluent    **French:** Advanced    **Arabic:** Native    **German:** Beginner

## Interests

**Sports:** Football and running, maintaining physical fitness  
**Technology:** Software architecture, backend systems, and scalable platforms

## Social Experience

**Red Crescent:** Coordinated disaster relief initiatives supporting 200+ families