

EDUCATIONAL PATH

August 2020 - Today	Aachen University of Applied Sciences Bachelor in Applied Mathematics and Computer Science
2017 - 2020	Moulay Ismail University 1-3. year, Bachelor in Applied Mathematics and Computer Science
2017	Emile Anouar High School Science Baccalaureate (Baccalauréat). Option: Physics and Natural Sciences

PROFESSIONAL EXPERIENCE

03/2024 - Today	Persistent Security Industries GmbH (Eupen, Belgium) Working student in the field of IT security and administration.
01/2023 - 02/2024	X41 D-Sec GmbH (Aachen, Germany) Working student in the field of IT security and administration.

KNOWLEDGE AND SKILLS

Programming languages:	Java, Python, SQL, C, C++, C#, Javascript, PHP, R, MATLAB, HTML, CSS, SCSS, Tailwind.
Programming environments and frameworks:	Amazon AWS, Apache and Nginx web server, Jakarta EE, Jakarta Mail, Spring-Boot, Hibernate, Django, Google Maps API, Paypal and Stripe API, Latex, UML, React, Nuxt.
Operating systems:	Windows, Linux, MacOS
Tools and software:	Eclipse, Git, NetBeans, MS Visual Studio, Emacs, MS Office, Adobe Photoshop / Illustrator / After Effects
Languages:	English - Fluent in spoken and written German - Goethe Institute B2 French - Fluent in written and spoken French Arabic - Mother tongue

EXPERIENCES AND PROJECTS

03/2024 - Today	Persistent Security Industries GmbH (Eupen, Belgium) Development of features and bug-fixing for Nemesis BAS (Breach and Attack Simulation) : <ul style="list-style-type: none">✚ Collaboration on Nemesis BAS (Breach and Attack Simulation), a platform for simulating cyberattacks that uncovers critical security vulnerabilities through realistic tests in a controlled environment.✚ Connection of front-end and back-end services, bug-fixing and optimization of the architecture to improve security and user-friendliness.✚ Execution of tests, automated deployments, code reviews and development of new features for secure and efficient system integration.
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01/2023 - 02/2024

X41 D-Sec GmbH (Aachen , Germany)

Implementation of a **user interface** and a **data API** for **PeT-HMR** :

Automated penetration testing using artificial intelligence. This project is a cooperation between X41 D-Sec GmbH, Lufthansa Industry Solutions AS GmbH, NetUSE AG and the Institutes for Information Systems (IFIS) and for IT Security (ITS) at the University of Lübeck. The project is funded by the Federal Ministry of Education and Research (BMBF).

10/2023

FH Aachen (Campus Jülich , Germany)

Seminar paper: Development of **Progressive Web Applications** with **React** .

- ✚ **Development of an app with PWA functions:** Integration of Progressive Web App (PWA) functionalities with React during app development.
- ✚ **Use of React:** Effortless integration of PWA concepts into React, resulting in an interactive and efficient to-do list application.

07/2021

FH Aachen (Campus Jülich , Germany)

Conception and coding of an existing board game "**The Crazy Labyrinth**" .

- ✚ Establishing communication between the client and server side of the application using XML messages .
- ✚ Development of an AI that is able to make the right moves to win the game (the maze).

02/2020 - 06/2020

Remote work (Marakkesh, Morocco)

Design, development and provision of a **web application** for a **transportation and logistics company**.

- ✚ Heavy use of Jakarta EE and AWS .

01/2020

Moulay Ismail University (Meknes, Morocco)

Participation and winning 2nd place at the **Coding Day** event.

- ✚ Development of an online store within an 8-hour time limit using JEE and Spring Boot.
- ✚ Implementation of basic store functionality including product management, shopping cart and order process.

10/2019

Moulay Ismail University (Meknes, Morocco)

Development of a **web application** for the administration of our entire **university** (in particular our IT department):

- ✚ Managing students and storing their personal data, namely: last name, first name, telephone number, address, current semester, grades, passed exams, absences, study certificate, etc.
- ✚ Management of lecturers and their personal data: Last name, first name, lectures, exams, absences, etc.
- ✚ Heavy use of Jakarta EE and Jakarta Mail .

07/2019

Moulay Ismail University (Meknes, Morocco)

Development of a **web application** for an **online travel agency** .

- ✚ Heavy use of Python and Django .

05/2019

Moulay Ismail University (Meknes, Morocco)

Development of a **web application** for the management and rental of **containers**:

- ✚ Manage and save container data and their storage options via an administration interface.
- ✚ Client interface with login options for customers who want to rent containers.
- ✚ Email notifications to customers after renting containers to inform them of the details of their transaction that was conducted via Stripe API.

SKILLS AND AREA OF INTEREST

Skills :

- ✚ Problem solving and algorithm development.
- ✚ Technical writing.
- ✚ Computer hardware development.
- ✚ Attention to detail.
- ✚ Teamwork & cooperation.

Area of interest:

- ✚ Machine learning, computer vision, web security.
- ✚ Development of web applications.
- ✚ Interest in new technologies.