DHIA MERZOUGUI

SOFTWARE DEVELOPER

◆ CAEN, FRANCE

◆ 06 05 66 47 33

• DETAILS •

Caen France 06 05 66 47 33 merzougui.dhia@gmail.com

• LINKS •

Portfolio | dhia.dev

<u>LinkedIn: Dhia Merzougui</u>

Github | HikariLight

• SKILLS •

Python

JavaScript

React.js

HTML & CSS

Git

Linux

Microservices architecture

Agile / Scrum

TypeScript

FastAPI

Node.js

Vue.js

SQL

С

C++

C#

Java

Docker

PROFILE

Software engineer with expertise in designing and developing user-focused web and software applications. Skilled in front-end and back-end technologies, software architecture, and working within international multi-disciplinary teams. I have worked on innovative projects in the healthcare field, improving monitoring and diagnostic tools. Seeking a software engineering role where I can apply my skills to contribute to impactful and innovative projects.

PROFESSIONAL EXPERIENCE

R&D Software Engineer at GREYC Laboratory, Caen

September 2024 — Present

Current contract position ending at the end of December 2024.

- Principal developer of formerly created real-time patient monitoring software A2MIMO (React.js/C#/Python/PostgreSQL).
- Development of an app to facilitate the automatic generation and correction of clinical notes using LLMs for healthcare professionals.
- Was a speaker at the annual FHU event to present developed healthcare tools to healthcare professionals (check this link for more details).

Internship: R&D in the Medical Field at GREYC Laboratory, Caen

February 2024 — August 2024

Worked as part of a team of researchers and engineers on patient monitoring software for psychiatrists (A2MIMO):

- Developed user interfaces for visualization of real-time patient analysis data in
- Developed backend pipelines for real-time collection, processing, analysis, and storage of multimodal patient data (text, audio, images) in Python/FastAPI and PostgreSQL.
- Developed neural classifiers for monitoring patient status (fatigue, emotions, sentiments) based on text, images, and audio data.
- Developed an LLM-based conversation engine for the patient-facing virtual agent interface.
- Developed the deployment strategy using Docker and Docker Compose.

EDUCATION

Master's in Computer Science, University of Caen Normandy

September 2022 — September 2024

Major: Algorithmics and Intelligent Systems

Graduated with high honors

Bachelor's in Computer Science, University of Caen Normandy

September 2018 — February 2022

LANGUAGES

English
French
Arabic

HOBBIES

Rock climbing | Reading | Cultural exchange | Travel | High-Tech (AR/VR)

Student developer: Artificial Agent for Mind Monitoring (A2MIMO)

October 2022 — January 2024

As part of my studies, I joined a research team at my university's laboratory, working on a project funded by the Normandy region, aimed at creating a virtual medical assistant for the detection of mental health disorders.

Link to the project's video description

University project: Retroactive anomalies detection in users' login activity

September 2023 — January 2024

During my studies, I worked as part of an Agile team of 12 developers in collaboration with the University's Information Systems Department (DSI) to create a prototype system for detecting login anomalies in the University's network.

- Was the principal developer for the profiling and user behavior analytics modules, which employed machine learning to detect anomalies.
- Contributed to the design of the system's overall architecture (micro services),
- Contributed to the deployment strategy using Docker and Docker Compose.

Entrepreneurial project: Briefer

January 2022 — June 2022

I collaborated with another developer on an open-source project designed to facilitate online research by simplifying, summarizing, and merging web pages.

My contributions included designing the overall architecture of the project and implementing several major components using JavaScript, HTML, and CSS.

Product website: briefer.netlify.app

★ SOFT SKILLS

Teamwork | Adaptability | Problem-solving | Autonomy | Technical and non-technical communication | Time management