

Tarek Messaoudi

Full Stack Engineer

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Education

IMT Lille-Douai


2012 - 2017

Software engineer major // with a foreign semester in South Korea at Chugnam National Univ.
Internships at Capgemini, GFI, Alliance Française Limassol, Lille 2 University, Norauto

Technical Skills

Programming Languages:  TypeScript,  JavaScript,  Python,  Java

Frontend Development:  React,  Tailwind CSS,  Remix

Backend Development:  NodeJs,  Deno,  FastApi,  Spring

Databases:  PostgreSQL,  SQLite,  MongoDB,  REDIS

Other Technologies:  Docker,  Kubernetes,  Git,  Linux

Work Experience

Full Stack Engineer

2020 - Present

Qynapse // A healthcare technology company specializing in neuroimaging and AI

 **Medical Imaging Web Platform Redesign**


     

- Refactored with a new admin panel, interactive data visualizations, and a robust MRI viewer, ...
- Added features such as segmentation correction, lesion tracking, 3D rendering, oblique views, multi-modality
- Maintained long-term stability of the viewer through refactors and testing

 **Reporting System Overhaul**


 

- Rebuilt the report generation pipeline using Jinja2 + Puppeteer (HTML → PDF)
- Redesigned templates for multiple languages and disease-specific variations (e.g., Dementia, MS, ...)

 **Scalable Infrastructure & Microservices**

- Contributed to converting the academic BrainVisa platform into a Kubernetes-based scalable pipeline
- Maintained and expanded the customer-deployed DIMSE agent, adding routing logic and detailed logging

 **Domain-Specific Tools**

- Built a normative Python library to compute statistical imaging metrics (z-scores, percentiles, asymmetry, ...)
- Developed a 3D mesh microservice for structural MRI data

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2017 - 2020

Alter Solutions // A consulting and IT services company

 **IRT System X: Central Dashboard promoting research project webservice**

- Develop the whole application from scratch

 **SFR Altice Group: Brand-new customer service web app**

- Refactor the whole custom CRM with new technologies and architecture
- Added core features (Mail/SMS notification, Tray system, ...)

 **Thalès: Local web app displaying military data from Excel file**

- Create a user-friendly tool for data visualizing inventory file (.xlsx)

 **PSA: Online tool to parse automobile file format (.a2l and .hex, .ulp)**

- Set up a backend service for parsing efficiently raw data files

Projects & Rewards

LOM ([GitHub](#)) - Browser strategy game

"Entreprise du Futur" Reward ([Site](#)) - By Thalès, from Challenge Entreprendre