

Hugo Math

ENGINEERING STUDENT IN 3RD YEAR · FREELANCER

Computer Science student · Double degree in Business Administration

☎ (+33) 6-49-11-53-54 | ✉ hugo.mathh@gmail.com | 🌐 hugomath.com | 📱 Mathugo | 📧 hugo-math-b12250175/

Summary

Hello ! I'm a final-year student in computer engineering with a double degree in business administration.

I am excited by AI, in particular neural networks, embedded machine learning, federated learning and its commercial applications

I have also worked as a freelancer in software development and AI since 2019. See my website See **my website** to know me better !

Work Experience

Edge AI Engineer

France, Lannion

ORANGE LABS - INTERNSHIP - INDUSTRY 4.0 - COMPUTER VISION AND EDGE AI

April. 2022 - August 2022

- Train and evaluate SOTA computer vision models on custom datasets using **Federated Learning (Flower, MobileNetv2-SSD, Custom CNN)**
- Local models evaluation on clients and then aggregating the weights on a remote server. Models monitoring with **MLFlow**. Deployment on embedded devices (**Jetson Xavier, TX2, PI3, Coral**) with quantized models (**Tflite, Pytorch Docker**) **Check this repo !**
- Design a **complete Robotic solution for the 4.0 Industry**. Grab objects by estimating 3D coordinates using depth camera, AI models and a robotic arm. App fully containerized with Docker, results on MQTT and FastAPI (**Yolov5, Opencv, Pytorch, RestAPI, Docker**) **Check this repo**

Dev Full Stack - Freelance

Switzerland, Milvignes

ATHENAI SA - SEMICONDUCTOR FAULT DETECTION - FREELANCE IN A STARTUP

April. 2020 - Now

- This experience allowed me to improve my **coding skills (C#, Python, .NET, Angular)** as well as my skills in **Computer vision and Data science**
- Working remotely in a **startup environment** enabled me complete autonomy and **decision-making over software development**.
- Taking **agile decisions and implementations** to make the client satisfied was one of the big challenges that we faced.
- The project was about coding an **optical wafer inspection software** for the industry in a Swiss startup (fault detection) - **.NET Python C++**

Education

ESIREM

Dijon, France

ENGINEERING DEGREE IN COMPUTER SCIENCE - SPECIALIZED IN SOFTWARE AND KNOWLEDGE ENGINEERING

2018 - 2023

- Software engineering, Neural Networks, Image processing, Data science, Big Data, Parallel Computing, Electronics, Networks
- Mathematics (linear algebra, analysis, statistics), Physics (waves, signal processing, quantum physics, optics, line transmission)

IAE Dijon

Dijon, France

MASTER IN BUSINESS ADMINISTRATION - DOUBLE DEGREE

2022 - 2023

- Company Management, Human Resources, Finance, Evaluation of costs and creation of a company, Strategic Marketing analysis

Chalmers University of Technology

Göteborg, Sweden

MASTER 1 ERASMUS STUDENT

August 2021 - January 2022

- Neural Network GPA: 4 (US) 21/24 Mobile Computing GPA: 4 (US) 130.00/160.00 - Data Science and AI - Technology and Society

AI	Federated Learning, Computer Vision Models, Edge AI, RNN, Transformers, Residual Networks, SVM, PCA, Clustering
Programming	Python, C#, C++, C, .NET, WPF, XAML, Angular, Django, FastAPI, Rest API, Flutter, Numpy, Java, Electron
Software	Pytorch, Tf, MLFlow, Docker, Kubernetes, VMWare, OpenCV, UNIX, Github, GCP, Firebase, PostgreSQL, NoSQL
Soft skills	Entrepreneurship, eager to learn, project management, Agile integration, open-minded, sociable, professional english

Honors & Awards

PROGRAMMING

- | | | |
|------|--|---------------|
| 2021 | Finalist , Datathon of Burgundy - Auto-segmentation of Cardiac MRI | Dijon, France |
| 2019 | First prize , Webcup - programming competition. This lasted 24 hours and the framework used was Angular | Dijon, France |

ENTREPRENEURSHIP

- | | | |
|------|--|---------------|
| 2021 | Finalist, Finance for Good . 5 month business creation program. See : deepwallet | Paris, France |
| 2021 | Finalist, Les Entrep' . 6 month business creation program as a project manager. | Dijon, France |

CERTIFICATION

- | | | |
|------|--|---------------|
| 2021 | Les Entrep' , Conduct an entrepreneurship project, work in team, establish costs, create the business | Dijon, France |
| 2021 | CCNA1 , Cisco certification - Basic understanding of networks | Dijon, France |
| 2021 | PEPITE , National student entrepreneur status | Dijon, France |