

Fabien Allemand

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Personal Profile

Master's student at Télécom Physique Strasbourg Engineering School, specialised in Data Science and Artificial Intelligence.
Primarily looking for Artificial Intelligence/Data Science internship from June to August 2023.

Education

Télécom Physique Strasbourg Engineering School

Strasbourg, France

Engineering Degree & Master in Data Science and AI

Sept 2021 - Current

- **Courses:** Deep Learning, Natural Language Processing, Data Mining, Computer Vision, Statistics, Game Theory, Algorithmic, Compilation, Big Data and Metadata
- FabLab manager.

Joffre High School

Montpellier, France

Selective Sixth Form

Sept 2019 - July 2021

- Specialised in Mathematics, Physics and Computer Science.

Charles Gide High School

Uzès, France

High School Degree

Sept 2016 - July 2019

- Graduated with Distinction.
- Specialised in Mathematics, Physics and Biology.
- Optional physics class in English.

Work Experience

Cemosis (Modeling and Simulation Center of Strasbourg)

Strasbourg, France

Internship

June 2022 - July 2022

- Cooperated with a team of researchers to develop an online platform of services for building energy simulation.
- **Technical Skills:** Python (IfcOpenShell, python-OCC, PyTest, xlswriter), CAD, Git.
- **Soft Skills:** Communication, Project management.

University Projects

Road Quality Assessment

Strasbourg, France

Télécom Physique Strasbourg Engineering School & Alcatel-Lucent Enterprise

January 2023 - February 2024

- Long-term engineering project in collaboration with Alcatel-Lucent Enterprise.
- Develop an AI powered Android application in order to improve road maintenance.
- **Technical Skills:** Python, Kotlin, Arduino, PCB, Git, Robot.
- **Soft Skills:** Business experience, Teamwork, Presentation skills.
- <https://faballemand.github.io/html/projects/pi.html>

Defect Prediction on Production Line

Strasbourg, France

Télécom Physique Strasbourg Engineering School

January 2023 - February 2023

- Develop an AI based solution for a real world industry problem.
- **Knowledge:** Supervised Learning.
- **Technical Skills:** Python (SciKit-Learn, Jupyter), Git.
- **Soft Skills:** Teamwork, Presentation skills.
- <https://faballemand.github.io/html/projects.html>

Database Parsing Program

Strasbourg, France

Télécom Physique Strasbourg Engineering School

Nov 2021 - Dec 2021

- C program to parse data from the DBLP data base.
- **Knowledge:** Graph theory.
- **Technical Skills:** C, Makefile, Bash, XML, Git, Doxygen.
- **Soft Skills:** Leadership, Critical thinking.
- <https://faballemand.github.io/html/projects/dblp.html>

Study of Tokamak's Magnetic Confinement

Lycée Joffre

Montpellier, France

Sept 2019 - July 2021

- Simulation of a single charged particle's trajectory in a nuclear fusion reactor using Python.
- Analysis of a nuclear fusion reactions and reactors.
- Numerically solving partial differential equations using SciPy.
- **Knowledge:** Nuclear Fusion Reaction, Electro-magnetic Fields, Partial Differential Equations.
- **Technical Skills:** Python (SciPy, Matplotlib).
- **Soft Skills:** Presentation skills.
- <https://faballemmand.github.io/html/projects/tipe.html>

Personal Projects

Tool for Industrial Designer

July 2022

- Python program to perform specific computation using a graphic user interface.
- **Technical Skills:** Python (PyQt), Photoshop.

Weather Station

Dec 2021 - Dec 2022

- Created an Arduino based weather station.
- **Technical Skills:** Arduino, PCB making, Soldering, 3D Printing.
- **Soft Skills:** Product designing.
- https://faballemmand.github.io/html/projects/weather_station_1.html

Video Games

Since 2020

- Video games development.
- **Technical Skills:** Python (PyGame, Numpy), C/C++, OpenGL, Unity, Unreal Engine, Blender, Photoshop, Git, Doxygen.
- https://github.com/FABallemmand/crazy_driver_1
- <https://faballemmand.github.io/html/projects/chess.html>

Personal Website

Since 2022

- Web development to create my personal website.
- **Technical Skills:** HTML, CSS, Git.
- <https://faballemmand.github.io/index.html>

Skills

Programming

Python (Numpy, Pandas, PyTorch, Scikit-Learn, TensorFlow, PyQt...), C/C++ (SDL, OpenGL), Java, Matlab, R, SQL, Shell, \LaTeX , Git, Doxygen, HTML, CSS

Software

Excel, Fusion 360, Blender, Ki-Cad, GIMP, Adobe Photoshop, Adobe Premiere.

Hard Skills

3D Printing, Soldering, Microengraving, Laser cutting.

Soft Skills

Time Management, Teamwork, Problem-solving, Documentation, Engaging Presentation.

Achievements

2023 **238/1084 (22 km)**, Nîmes Urban Trail.

Nîmes

2022 **127/612 (21 km)**, Corrida de Noël Illkirch-Graffenstaden.

Illkirch-

Graffenstaden

2022 **Challenge Finisher (31 km)**, Courses de Strasbourg.

Strasbourg

2021 **Best Application Mock-up**, Hacking Industry Camp 2021 (AI Edition).

Strasbourg

Interests

Sport

Running and hiking (<https://www.strava.com/athletes/88953196>).

Traveling

Recent trip to Budapest, Hungary and Barcelona, Spain.

Languages

French

Native speaker

English

TOEIC C1

Spanish

Professional proficiency

References available upon request.