



Maël Madon

Software Engineer with PhD

About Me

Software engineer in C++ and Python, looking for a position with meaningful or sustainable impact.

Professional Experience

Apr21 - Jun24, PhD thesis

Université de Toulouse (Toulouse, FRANCE), IRIT laboratory

Studying “digital sufficiency behaviors” to decrease data centers’ environmental impacts:

- Developing the HPC user simulator Batmen in C++ (10k+ lines).
- Launching simulation campaigns in parallel on an HPC platform.
- Analyzing the experimental results with Python and Pandas.

Other tasks:

- Leading several international collaborations, including a 3-month research visit at the Vrije Universiteit Amsterdam.
- Project lead within the state-funded research project Datazero2.
- Teaching and supervision of Bachelor and Master students.

Sep20 - Mar21, Master's thesis

Ericsson (Stockholm, SWEDEN)

Developing an Excel tool to streamline the carbon footprint assessment of telecommunication base stations, successfully adopted by the company.

Apr - Jul19, Research Intern

Université de Toulouse (Toulouse, FRANCE), IRIT laboratory

Python simulation and mathematical optimization (MILP) of the electric and thermal components of a data center to study cooling load-shifting.

Jun - Aug18, Project Manager

ENEDIS - French electricity distributor (Aurillac, FRANCE)

Supervising the setting up of an electricity consumption monitoring platform (HTML, AngularJS) for local governments.

Education

2024, PhD in Computer Science

Université de Toulouse (Toulouse, FRANCE)

2021, M.Eng. in Computer Science

KTH Royal Institute of Technology (Stockholm, SWEDEN)

Software Engineering (Git, CI/CD), DevOps (Docker, GitHub runner)

2021, École Polytechnique's diploma (B.Eng.&M.Eng.)

École Polytechnique (Paris, FRANCE)

France's leading school of Science and Engineering

Programming (Java), Algorithmic, Web (PHP, HTML/CSS, MySQL)

Extracurricular activities

Jul24 - Aug25, Gap Year

40-day alpine crossing on foot

Backpacking and volunteering in South America

2017 - now, member of several choirs and a caving club

Contact

mael.madon@m4x.org
+33 (0)6 02 32 68 73

maelmadon.github.io
linkedin.com/in/mmadon

Address

Heinrichstrasse 68/3
8010 Graz, Austria

Skills

Leadership, teamwork,
quick learner,
autonomous

Programming

C++, Python, Pandas,
PHP/HTML/CSS/SQL
Linux, Git, VSCode

Research impact

7 publications
h-index: 5 (G.Scholar)

Languages

French (native)
English (C2)
Swedish (B2)
Spanish (B2)
German (B1)

Interests

Green IT
Sustainability
Open Source
Reproducibility

Hobbies

Climbing, hiking,
caving, motorbiking
and choir singing