

Experience

Professional Experience.....

MargoConseil

Paris, France

IT Consultant at Ledger

Dec 19 – Ongoing

C++ (& JNI bindings) / Rust / Javascript native modules / Scala (Cats/fs2) / PostgreSQL

As a back-end software engineer (Libcore/backend team - supervised by Pierre Pollastri), my prerogatives included:

- Technical validation of candidates in **C++** and design interviews
- Study of different crypto currencies and blockchains protocols to prepare integration
- Wallet and synchronization abstraction writing in **C++** within MIT "core" Ledger library
- Cosmos integration in Ledger Live, including **C++/JS** integration
- Creation and deployment of a **Rust**-based wallet
- Development of the wallet service used in the back-end of the B2B division (in **Scala**)

MargoConseil

Paris, France

IT Consultant at Engie

Mar 19 – Dec 19

Python3 / PostgreSQL / Gitlab CI / Flask / SQLAlchemy

As a back-end software engineer (WattsOn core team - supervised by Grégory Ghez), my prerogatives included:

- Migration of configuration management system (from **Ansible** inventory to Python module with asymmetric secret encryption)
- Migration of database schema to enhance performance
- Change lead on linting/code quality tooling
- Rewriting of API authorization (permissions) system, endpoint creation and maintenance, DAG management

PSL Mines ParisTech (Centre de Mise en Forme des Matériaux)

Sophia-Antipolis, France

Research engineer in Computational Mechanics (supervised by P.-O. Bouchard, Y. Tillier)

Oct 15 – Dec 18

C++ / Python3 / Java

Development of a numerical tool to predict lifetime of dental composites (TOOTHBOX ANR Grant 16-CE08-0024)

- Design/Maintenance of a **C++**-based multiphysics computational homogenisation framework
- Design of a simulation protocol for constitutive law homogenisation
- Design of an experimental protocol to validate simulation results
- Quality of Life improvements on laboratory software (NaN chase, DSL editor plugins, **Python** helpers...)

Institut de Biomécanique Humaine Georges Charpak (IBHGC)

Paris

Research Intern in Computational Biomechanics (tutored by Wafa Skalli and Clayton Adam)

Jan 15 – Jun 15

MATLAB / ANSYS

Multiscale characterization and modelling of intervertebral discs (*DiscSim Project*)

- Image processing (**MATLAB**) to create a custom FE Model on **ANSYS** to enhance living tissue modelling.

Volunteer Experience.....

R7.rs

Maintainer

Online

Jan 21 – ongoing

Rust hosted R7RS-small scheme interpreter (WIP)

- Allow arbitrary Scheme to be interpreted to Rust native types
- Allow native expansions to Scheme

Neovim-Qt

Contributor

Online

Dec 18 – Dec 19

C++ Qt5 Graphical User Interface for <https://neovim.io>

- Externalisation of Command Line display using Qt GUI
- Redaction of **small RFCs** to discuss direction of project

Open Source Society University

Selection of open computer science courses

Online

Sep 17 – Mar 19

Curated list of computer science courses covering many subdomains

Education

Ecole Nationale Supérieure des Arts et Métiers ParisTech

Master of Materials Science (MAGIS)

Paris, France

Sep 14 – Jun 15

- Polymer Lifecycle course (with high honours)

École Polytechnique (Top Ranking French Institute of Technology)

Polytechnique Engineer – Master of Engineering

Palaiseau, France

Sep 10 – Dec 15

- Several topics studied (Biology, Economics, Physics)

- Mechanics specialisation (Finite Elements, Plasticity, Shape optimisation and Materials Science)

Other

Languages.....

French Mother Tongue

English Fluent

German Last professional experience in 2014

Skills & Hobbies.....

Languages C/C++, Rust, Python, Scala, LaTeX, Git

Software Linux user since 2011

Sports Basket-ball (organized play in club), slight interest in rollerblading