

Paul BAGOURD

French



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RESEARCH IN COMPUTER SCIENCE

EPFL LAUSANNE - MASTER DEGREE IN MATHEMATICAL ENGINEERING

Rigorous, curious, passionate with communication skills in team environment, I enjoy exploring the forefront of scientific advancements to contribute meaningfully to our evolving world.

Experiences

QUANDELA (Paris): French leader in the field of photonic quantum computers: 2023 - 2024
6 months Internship - Design of quantum optical experiments to generate entangled quantum states.
2nd best paper award at 2024 IEEE Quantum week conference : "simple rules for two-photon state preparation with linear optics"

LAUZHACK (Lausanne): Conception of quantum computing oriented challenges with two colleagues for participants of the Lausanne hackathon (Lauzhack). 12/ 2022

EPFL (Lausanne): Teaching Assistant, mentor and tutor of mathematics, physics, and chemistry for Bachelor students at EPFL. 2018-2022

LABORATORY OF AIX MARSEILLE UNIVERSITY: Research project on the production of a molecule with a complex chemical structure (hemicyclopentane). Spring 2018

Education

Ecole Polytechnique Fédérale de Lausanne
Master in Applied Mathematics (Minor in Quantum Science and Engineering) 2021 - 2024
Information theory - Statistics - Algorithms and optimisation – Cryptography

Master project in Neural Data Compression, chair of Statistical Field Theory, EPFL Spring 2024

Research project on the robustness of McEliece cryptosystem for post-quantum cryptography, chair of Arithmetic, EPFL Spring 2023

Bachelor in Mathematics 2018 - 2021

Technical skills

PYTHON (Pytorch, Pandas, Scikit-learn, Hugging Face), R, MATLAB, SQL

Languages English C1, Spanish B1, Chinese A2, French (mother tongue)

Interests

Associative: Communication Manager for the literary association "PLUME" at EPFL. Youth organisation "Les Iris" (Marseille): member then coordinator, planning activities and itinerant hiking and cycling camps (Europe bike tour). Member of the association "Ingénieurs du Monde" at EPFL: writing articles on cooperation between North/South countries and ecological issues.

Sports: kitesurfing, surfskate and tennis. **Arts:** music (piano and guitar, compositions using Ableton software), poetry (1st prize in the poetry contest at the Festival de la Harpe, 2021).