

EDUCATION

EPFL, LAUSANNE

MASTER IN COMPUTER SCIENCE
2021 - Aug. 2023 | Switzerland

ENS DE LYON

BS AND MS IN COMPUTER SCIENCE

2019 - Aug. 2023 | Lyon, France
During BS and 1st year of master:
Cum. GPA: 18.26/20, corresponds to A

PRÉPA MPSI - MP*, LYCÉE DU PARC

PRÉPA AUX GRANDES ÉCOLES
2017-2019 | Lyon, France
Computer Science specialization

COURSEWORK

GRADUATE

Advanced Cryptography
Information Security and Privacy
Data bases and data mining
Advanced Machine Learning
Computer Algebra
Computer Graphics
Compilers and program analysis
Information Theory
Distributed Algorithms
Networking

UNDERGRADUATE

Advanced Algorithms, NP-completeness
Programming language theory
Computer Science Foundations
Probability
Architecture, Systems, Networks
Logic
Quantum Computing
Advanced mathematics and Physics

SKILLS

PROGRAMMING

Proficient in:

C • C++ • Golang • PHP • Java • Shell •
Python • Javascript • OCaml • \LaTeX

Familiar with:

Erlang • Rust • HTML • CSS

LANGUAGES

English — Proficient (C1 Advanced)
French — Native

HOBBIES

Climbing, Cooking, Hiking

EXPERIENCE

SACS LABORATORY, EPFL | STUDENT INTERN

April. 2021 - Jul. 2021 | Lausanne, Switzerland

- Evaluation of the quality and improvement of GoldFinger, a method for approximating Jaccard similarity in KNN applications. Major contributions to [NMSLIB](#), and to [ANN-benchmarks](#). Paper submitted to TKDE (IEEE Transactions on Knowledge and Data Engineering).
- In parallel, showcase of gossiping on a network of Raspberry Pis. Implementation of the decentralized file sharing protocol Hypercore on this network.

LABRI | STUDENT INTERN

Jun. 2020 - Jul. 2020 | Bordeaux, France

- Work on Intel SGX to build a proxy anonymizing requests to an untrusted recommendation app. Based on batching, and pseudonymization.
- Creation of a scalable structure, with the provisioning of new enclaves on the go. SGX DCAP to speed up attestation inside the datacenter.

OPEN-SOURCE | OPEN SOURCE CONTRIBUTOR AND MAINTAINER

2015 – Present

- Major contributor to the PHP web framework [Symfony](#). Member of [FriendsOfSymfony](#). Lead Maintainer of [NelmioApiDocBundle](#) (2k stars, hundreds of contributors).
- Contributions to Intel SGX, NMSLIB, ANN-Benchmarks.

EXTRA-CURRICULAR PROJECTS

2020 - Present

- [Saccha](#), dog model reproducing heart murmurs for training veterinary students. Electronics, 3D Printing and Desktop app development.
- [ToGather](#), React Native mobile app for finding events around one's position.
- [Modeling of impact of Covid-19 tracing apps](#).
- Vice-president of [AliENS](#), the IT association of ENS de Lyon. Sysadmin, programming, events organization.

2011 - 2017

- **Various websites:** [JPF company](#) e-commerce website based on Prestashop. [Dofawa](#), a Dofus fansite based on Symfony.

CONTESTS

2021	5 th /90+	TRACS, hacking contest organized by the DGSE and Centrale.
2021	51 th /107	SWERC, Southwestern Europe Regional Contest
2021		Participated to Google Hash Code 2020 & 2021
2020		Participated to Google Code Jam round 1
2019	2 nd /90+	TRACS, 2019 edition.
2019	18 th /10000+	BattleDev, programming contest.

PUBLICATIONS

- [1] R. Guerraoui, A-M Kermarrec, G. Niot, O. Ruas, F. Taïani. Goldfinger: Fast approximate jaccard for efficient knn graph constructions. *Transactions on Knowledge and Data Engineering*, in review.