

Antoine Martin

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Education

- 2021–Ongoing **PhD student**, *Sorbonne Université*, Paris.
LRDE, EPITA Research and Development Laboratory
- 2016–2021 **Engineering Degree, Computer Science**, *EPITA*.
Majored in Image Processing and Computer Graphics, with a minor in Computer Science Research
- 2018 **Exchange Student**, *City University of Hong Kong*, Hong Kong.
Computer Science

Experience

- Feb 2021 – **Software Engineering Intern**, *DGEX Solutions*, SNCF Réseau.
Jul 2021
 - Working on interactive visualization of petabytes of LIDAR point cloud data with C++/OpenGL, Rust/WebGPU
- Sep 2019 – **Image Processing Software Intern**, *Langevin Institute*, CNRS UMR 7587, Paris.
Dec 2019
 - Development on image processing software for retina Doppler imaging
 - High throughput GPU algorithms for real time medical imaging using CUDA, CuFFT and CuBLAS
 - User interface in C++/Qt, in collaboration with hospital physicians
- Aug 2017 – **Undergraduate Student Researcher**, LRDE, Research and Development lab, EPITA.
Jan 2021
 - Spot Team – Automata and verification C++14 library – <https://spot.lrde.epita.fr>
 - Work on `go2pins`, adapting Go programs to the PINS interface for model checking tools
 - Implementation of state of the art, parallelized algorithms for automata transformation and model checking
 - Quickref automates generation of documentation for Common Lisp programs <https://quickref.common-lisp.net>
- Sep 2018 – **Teaching Assistant**, *EPITA*.
Jan 2021
 - Taught C++, Java, C and Unix to third year students. OCaml and .NET to first year students.
 - Lead the organization of a three weeks workshop to teach C and Unix programming
- Aug 2017 – **Junior Software Developer**, *Okkur Labs*, Part time, remote.
Mar 2019
 - Writing open source software using Go.
 - Built TXTDirect, backend software for DNS record based redirects, now serving 400k daily requests

Extra curricular activities

Programming Contests

- 2018 **SWERC contestant**.
Participation to the Southwestern European Regional qualifications for the ACM ICPC
- 2017 to 2019 Google Hashcode contestant

Volunteer work

- 2018 – **Organizer**, *Prologin*, French National Programming Contest, <https://prologin.org>.
Present
 - Helping organize the contest
 - Redaction of algorithmic problems and written exams
 - Contributions to internal tooling and website code base
- 2019 – **Staff member**, *Girls Can Code!*, Programming summer school, <https://girlscancode.fr>.
Present
 - Produce new teaching material and content
 - Help participants with their questions during workshop

Programming skills

- Technologies Docker, Gitlab CI, Nix, Django
Languages Rust, C++, C, Go, Python, CUDA

Language

- English Fluent. TOEFL score: 113/120
French Native speaker