

Thibault Allançon

Computer science student

Experience

Employment

- Sep – Jan 2021 **Software Engineering Intern**, *SOFTWARE HERITAGE (INRIA)*, Paris
Built a user-space POSIX filesystem to mount and explore the Software Heritage archive as if it was locally available. Publication of a scientific paper in an international peer-reviewed conference [1].
- Jul – Sep 2020 **Software Engineering Intern**, *JANE STREET*, London
Summer internship program, worked on multiple financial analysis tools in OCaml.
- Mar – Aug 2019 **Google Summer of Code**, *SOFTWARE HERITAGE (INRIA)*, Paris
Compression of the Software Heritage graph data model (12 billion nodes, 165 billion edges) using state of the art compression techniques. Development of a REST API to query the compressed graph, and Docker environment to automate the graph compression pipeline.

Community

- 2019 – present **Teaching assistant**, *EPITA*, Paris
Teach programming skills to EPITA students (C, UNIX, C++, Java, Caml, C#) through courses, talks and projects. Responsible of the 2020 C++ workshop, and 2021 C/UNIX workshop.
- 2017 – present **Organizer in nonprofit organizations**, Paris
- PROLOGIN: the French national programming contest, redaction of algorithmic problems and exercises for qualification and semi-final rounds, creation of the custom-made game environment for the finals. President of the organization in 2020.
 - GIRLS CAN CODE!: one-week programming summer school for middle and high school girls. Our goal is to close the gender gap in computer science, by allowing girls to discover the field in a fun and safe environment.

Education

- 2017 – present **MSc in Computer Science**, *EPITA*, Paris
Expected graduation: 2022.
- 2020 – 2021 **Research student**, *LRDE*, Paris
Implementation of concurrent model checking algorithms in C++ for the Spot library using bitstate hashing, a memory-efficient technique to perform high coverage verifications with orders of magnitude smaller memory footprint.
- 2017 **Scientific Baccalauréat**, Paris
With highest honors (specialization track: mathematics).

Skills

Technical

Programming	C, C++, Python, Java, SQL, OCaml, Rust, Bash, \LaTeX	Systems	GNU/Linux, macOS, Windows
Tools	git, mercurial, make, cmake, autotools		

Languages

French	Native speaker	English	Fluent (TOEIC: 980)
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Publications

- [1] Thibault Allançon, Antoine Pietri, and Stefano Zacchiroli. “The Software Heritage Filesystem (SwhFS): Integrating Source Code Archival with Development”. In: *ICSE 2021: The 43rd International Conference on Software Engineering*. IEEE, 2021, pp. 45–48. DOI: 10.1109/ICSE-Companion52605.2021.00032.