

✧ Education and Qualifications

- 2020–2024** **Licence's Degree (L3) & passed M1, in Computer Science, École Normale Supérieure of Rennes, Rennes, France.**
Ranked 80th at the 2020 ENS Rennes' computer science entrance exam. Mainly taking classes with practical programming projects, in graphics, security, low level, etc.
- 2018–2020** **MPSI and MP*, Lycée Saint-Louis, Paris, France.**
Higher Maths and Physics, Computer Science.
- 2018** **Scientific Baccalauréat, Lycée Thérèse d'Avila, Lille, France.**
Highest honors.

✧ Tools & Programming Languages

- Comfortable using** **Rust, Cargo, C (up to C18), C++ (up to C++17), Python**
OpenGL, GLSL, Wgpu, WGSL
VSCode, Git, GitHub, Linux
- Already worked with** **Unity, C#, HLSL, Vulkan, Cmake, Java, OCaml, Bash, Assembly (x86_64)**

✧ Personal Experience

Started programming as a hobby in 2013 and spent a lot of time on personal hobby projects ever since. A portfolio of my most relevant and presentable projects is available at anima-libera.github.io. These passion projects are about games, tools, programming languages, compilers, graphics, etc.

Familiar with: low level (optimization, memory management, debugging, assembly), high level (abstractions, OOP, debugging logic bugs), multithreading, GPU (graphics and compute), custom widget-based UI, procedural generation (terrain or other content, custom value noise), good practices (management of ownership, maintainable code).

✧ Academic Experience

- 2022–2023** **Internship, INRIA (National Institute for Research in Digital Science and Technology), Lille, France.**
Retro-engineering and covert-channel attack on the branch predictor unit of a modern Intel CPU. Over 6 months.
- 2022** **Computer Graphics Internship, Multi Fragment Rendering, Athens University of Economics and Business, Greece.**
Learning and implementation of some multi-fragment rendering techniques in C++/OpenGL. Over 3 months.
- 2021–2022** **Research Project, String Art, IRISA (Research and Innovation Laboratory in Digital Science and Technology), University of South Brittany, France.**
Study, implementation and optimization in C/C++ on string art, a non-photorealistic rendering technique. Over 1 year. Co-authored a paper published and presented at an international conference.
- 2021** **Security Internship, Study of the vulnerabilities emerging from the linking of hardened C/C++ code with Rust code, INRIA, team CELTIQUE, France.**
Reading of papers, problem analysis and presentation, C/Rust programming. Over 2 months.
- 2020** **Security Project, Exploiting buffer overflows, heap corruption, return-oriented programming, sandbox escaping, ENS Rennes, France.**
Reverse-engineering, assembly, attack and defense, practice and paper reading. In C. In groups of 2, over 5 months.
- 2018** **Participating to the "TFJM²" (Tournois Français des Jeunes Mathématiciens et Mathématiciennes) Maths Tournament, Lille, France.**
In teams, ranked 2nd in Lille's pool. Maths and programming research problems.

✧ Hobbies & Miscellaneous

Video games, manga, anime
Programming for personal projects (a lot)
Reading sci-fi/fantasy novels
Driver's license

✧ Languages

French	<i>Mother Tongue</i>	
English	<i>Fluent</i>	Spoken and written Technical vocabulary TOEIC 2022: 955/990 (C1 level)