### **\* Education and Qualifications**

Master's Degree (up to M1) in Computer Science, École Normale Supérieure of Rennes, 2020-2024

Rennes. France.

Ranked 80th at the 2020 ENS Rennes' computer science entrance exam. Mainly taking classes with practical

programming projects.

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

Already worked with Unity, C#, HSLS, 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.

# \* Academic Experience

2021

| 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 on string art, a non-photorealistic rendering technique. Over 1 year. 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, 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 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 2<sup>nd</sup> 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 Mother Tongue

Spoken and written

**English** Fluent Technical vocabulary

TOEIC 2022: 955/990 (C1 level)