SOFIANE **H. DJERBI**
Computer Science | Mathematics

☐ (+33)695 800 269   @ contact@kugge.dev   ⧉ kugge.dev
○ github.com/Kugge   ♦ France, 07500 Guilherand-Granges
i I'm a 22 years old passionate developer who loves to build and create awesome software.

</> KEY SKILLS

Languages	**Python**, **Java**, **C**, C++, **Rust**, Nim, **Haskell**, OCaml, Bash, GLSL
Libraries	Pyplot, **Numpy**, Pandas, Gloss, SDL2, **NCurses**, Scipy, **Rayon**
Tools	**Git**, Maven, Gradle, **Makefiles**, **Linux**, Doxygen, LaTeX, **Github**, Sphinx, Shadertoy

📋 EXPERIENCE

September 2021 — July 2022

Freelance developer, KUGGE, Working from home
- › Juggled freelancing projects, meeting tight deadlines with top-notch quality.
- › Partnered with clients from varied sectors, tailoring solutions to unique business needs.
- › Fostered lasting client relationships, leading to referrals and a steady project stream.

Java | Reverse engineering | Raspberry Pi

September 2021 — July 2022

Math Tutor, DLST, Université Grenoble Alpes
- › Weekly monitoring of first-year students.
- › Ensure understanding of abstract mathematical concepts.
- › Supervise a group of students and introduce them to a mathematical topic.

Set Theory | Applied Mathematics | Real Analysis

December 2021 — April 2022

Internship (Project Manager), CEA LETI, IM²AG
- › Project planning and scheduling.
- › Working with a group of students on a project.
- › Interfacing microcontrollers.

Visual Basic | Python | Microcontroller | Project Management | API Creation

🌐 LANGUAGES

French (Native) ● ● ● ● ●
English (B2.2) ● ● ● ● ○

✚ STRENGTHS

- › Quick learner, absorbs new knowledge with ease
- › Resourceful problem solver, consistently innovative

🎓 EDUCATION

2022 - 2023	**Magistère** de Mathématiques
2019 - 2022	**Licence** Mathématiques et Informatique, mention "Bien"
2015 - 2019	**Baccalauréat** Scientifique, mention "Bien"

💻 EXAMPLE PROJECTS

KAIIJU   2023

○ github.com/KaiijuMC/Kaiiju

A Multithreaded Minecraft server software that incorporates a new ZSTD-based compression system, reducing disk space usage by 50%. It provides options to select and optimize game mechanics, such as asynchronous pathfinding.

Java | Reverse-engineering | Threading

NONOGRAM SOLVER   2021

○ github.com/Kugge/Nonogram-Solver

Use SAT solvers to solve Nonograms, making it an excellent way to benchmark the performance of such solvers. Additionally, it comes with an automatic Nonogram scraper, serializer, and deserializer.

Python | Scrapping | Logic | Sat Solvers | LaTeX

PYBOY ENV   2020

○ github.com/Kugge/pyboyenv

A Python package that allows you to turn any Gameboy memory event into a reinforcement learning environment rule, enabling you to use any Gameboy game as an OpenAI Gym environment for your exploratory and educational pursuits.

Python | PyBoy | Reinforcement Learning | Gym