# SOFIANE H. DJERBI

# Computer Science | Mathematics

i I'm a 22 years old passionate developer who loves to build and create awesome software.

# </> KEY SKILLS

Languages Python, Java, C, C++, SQL, Haskell, Rust, OCaml, Bash, C#, GLSLLibraries Pyplot, Numpy, Pandas, Gloss, SDL2, NCurses, Scipy, Rayon

Tools Git, Maven, Gradle, Makefiles, Linux, Doxygen, LTFX, Github, Sphinx, MongoDB



# August 2021

# Freelance developer, Kugge, Working from home

September 2022

- > 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 Bash SysAdmin DevOps

## 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, IM<sup>2</sup>AG

> 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) • • • • •

- > 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 game 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 MTEX

### 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 OpenAl Gym environment for your exploratory and educational pursuits

Python PyBoy Reinforcement Learning Gym