

# SOFIANE DJERBI

## Computer Science | Mathematics

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🐙 [github.com/Kugge](https://github.com/Kugge) 📍 France, 07500 Guilhaud-Granges

👤 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 | **Math Tutor, DLST, Université Grenoble Alpes**  
July 2022  
— 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 | **Internship (Project Manager), CEA LETI, IM<sup>2</sup>AG**  
April 2022  
— 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"

## 🏆 AWARDS

November 2021 | **CS Contest Winner, IM<sup>2</sup>AG, Université Grenoble Alpes**  
— Solving problems as a team.  
— Dealing with NP-Hard problems.  
Problem Solving Teamwork Git

## 💻 PROJECTS

### JULIA ROTATION / MANDELBROT ZOOM

2022

📺 <https://www.youtube.com/watch?v=zFuWUMd3WK4>

A GLSL Shadertoy implementation of a simple Julia morph and Mandelbrot zoom.  
Interactive versions are available [here](#).

GLSL Shadertoy GPU

### HASKELL CONNECT4

2021

🐙 [github.com/Kugge/Haskell-Connect4](https://github.com/Kugge/Haskell-Connect4)

Implementation of the Connect 4 game in Haskell, with minimax AI.

Haskell Minimax Gloss

### NONOGRAM SOLVER

2021

🐙 [github.com/Kugge/Nonogram-Solver](https://github.com/Kugge/Nonogram-Solver)

Scrapping and solving Nonograms with SAT Solvers.

Python Scrapping Logic Sat Solvers  $\LaTeX$

### PYBOY ENV

2020

🐙 [github.com/Kugge/pyboyenv](https://github.com/Kugge/pyboyenv)

Turn any gameboy game into a reinforcement learning environment.

Python PyBoy Reinforcement Learning Gym