# Rania Zougari

 

♦ Grenoble, France
Image: in RaniaZougari 😯 RaniaZougari

# **Education**

# Grenoble INP - Ensimag

2023-2026

MSc in Computer Science Engineering & Applied Mathematics + MSc in AI

- o Specialization: Artificial Intelligence, Machine Learning, and Statistics
- Relevant Coursework: Deep Learning, Advanced Statistics & Probability, Data Science, Data Engineering, Operational Research, Computer Vision, NLP
- o Recognition: France's #1 Computer Science Engineering School (Le Figaro Étudiant 2025)

## MPSI/MP\* Preparatory Classes (CPGE)

2021-2023

Mediterranean High School of Martil, Morocco

# Experience

## CNRS - University Grenoble Alpes

June-Aug 2025

AI Research Engineer Intern

Grenoble, France

- Developed a high-precision RAG system for literature reviews, leveraging LLMs and reranking techniques.
- Containerized the full pipeline (Podman) and ensured local deployment reproducibility.
- Presented the results to researchers, leading to discussions for large-scale deployment.

## Nsigma Junior Enterprise

March 2024-2025 Grenoble, France

Quality Manager

• Conducted internal audits ensuring legal compliance and quality improvement within the structure.

o Advised on fund management and helped reach a €86,000 turnover.

#### RING Laboratory - University of Lorraine

July-Aug 2024

Simulation & Modeling Research Intern

Nancy, France

- Integrated geothermal modeling algorithms into TIFLOW (Python) for transdimensional inversion.
- Designed simulation algorithms for fluid absorption in porous media.

#### Bureau Des Arts (BDA) - Ensimag

Mar 2024 - Apr 2025

Events Manager

Grenoble, France

Managed 5 events for 200 students & led teams of 25 volunteers developing management skills.

## **Projects**

### ML pipeline to predict Roland Garros winner using logistic regression

June 2025

o Developed logistic regression model achieving 80% accuracy on historical tournament data using Python, Scikit-learn and Pandas.

#### AI Board Game (Blob War)

April 2025

• Developed an AI-driven board game in C++ using Minimax and Alpha-Beta pruning.

#### Deca Programming Language Compiler

Dec 2024 - Jan 2025

• Designed and implemented complete compiler from scratch in Java with BYTE extension.

#### Scalable auction platform

Nov 2024

• Implemented distributed DB architecture with MySQL, ensuring ACID compliance and data consistency.

#### Technical Skills

Programming Languages: Python, Java, C++, C, R, SQL, Html/Css/JS

AI/ML Technologies: TensorFlow, PyTorch, Scikit-learn, Pandas

Engineering: Docker, Podman, Git, DevOps, MySQL, Oracle, PostgreSQL

**Development Tools:** VS Code, Jupyter Notebook, RStudio, shell.

## Languages

French: Native Arabic: Native English: Fluent (C1) Spanish: Intermediate (B2)

## Hobbies

Snowboard, Tennis, Music, Painting, Literature, Business, Finance, Traveling.