Baptiste PRAS

Bachelor student in Computer Science

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I am a Bachelor's student at University Paris-Saclay, passionate about Artificial Intelligence and Data Science. I aim to further my studies in these fields to deepen my knowledge, gain hands-on experience and ultimately pursue a PhD to contribute to research and innovation.

EDUCATION

Computer Science Magister

Paris, France

University Paris-Saclay (GPA: 13.8/20)

2024-2025

- Selective and prestigious program
- Reinforced curriculum with advanced computer science courses, with a focus on artificial intelligence and distributed algorithms
- University ranked 1st worldwide in mathematics (Shanghai ranking), and 12th overall, highlighting its academic excellence

Dual Bachelor Degree in Computer Science and Mathematics

Paris, France

University Paris-Saclay (GPA: 14.67/20 | 14.47/20)

2022-2024

 Integrated rigorous coursework in mathematics and computer science, providing a strong foundation in algebra, probability, data structures, and algorithms, while fostering advanced skills in problem-solving and computational thinking

High School Baccalaureate

Rumilly, France

Démotz de la Salle High School (GPA: 16.88/20)

2020-2022

- Specialization in mathematics and computer science, graduated with highest honors
- Participated in several Erasmus programs (Denmark, Croatia, Italy, Hungary)

English School

New-York, USA

EF New-York

2019-2020

- Completed an intensive English immersion program, achieving C2 proficiency
- Developed independence, autonomy, and cultural openness by living alone in a foreign country at the age of 16

PROFESSIONAL EXPERIENCE

Study and Research Project (internship)

Paris, France

LISN

January - April 2025

- Studied the impact of class imbalance in train and test sets on classification tasks performance, aiming to identify an optimal imbalance ratio different from 0.5
- Conducted experiments in Python, using Scikit-Learn, NumPy, and MatPlotLib
- Analyzed various class imbalance scenarios using a hand-coded spherical Teacher-Student perceptron, introducing different noise levels, using different loss functions and learning methods, such as gradient-based training and Langevin dynamics
- Generated and processed different types of data, primarily Gaussian distributions

Generative Al Trainer Remote

Outlier 2025

- Designed and refined prompts to enhance the performance of generative AI models
- Reviewed and corrected Al-generated outputs to ensure accuracy and quality
- Contributed to the continuous improvement of deep learning models through feedback and prompt optimization

Stock Associate (summer job)

Seyssel, France

Carrefour Market

2021-2024

• Ensured optimal shelf stocking, provided customer assistance, and maintained high standards of store organization

ACADEMIC PROJECTS

- <u>Spherical Teacher-Student Perceptron:</u> Implemented in Python a spherical Teacher-Student perceptron, entirely hand-coded using only NumPy, to analyze various class imbalance scenarios
- <u>Image Classification:</u> Developed a machine learning model for the recognition of specific traffic signs using supervised learning algorithms. Extracted data from pictures, preprocessed it and trained several models on it. Reached a performance of over 95%
- <u>Java-like Interpreter:</u> Made an interpreter based on Java, implementing various instructions, basic arithmetic, classes and methods. Implemented Java-like type checking. Coded in OCaml, Ocamllex and menhir
- <u>Various 2D Games:</u> Air Hockey in Python; Labyrinth creation and solving in Ocaml; Colt Express in Java; Termite Battle simulation in C++; Data treatment in C++

SKILLS AND INTERESTS

Hard Skills

- Python: Proficient, experienced in NumPy, MatPlotLib, Pandas, Seaborn, Scikit-Learn
- C++/C: Proficient
- **SQL, HTML, Processing:** Familiar with
- Ocaml, Java: Intermediate
- Office Suite: Word, PowerPoint, Excel

Languages

- <u>French:</u> Native language
- English: C2 proficiency
- Russian: Basic knowledge (A1-A2)
- German: Basic knowledge (A1-A2)

Soft Skills

- <u>Teamwork, collaboration and leadership:</u> Developed through 15 years of basketball, including coaching and refereeing younger players
- Work ethic: Demonstrated punctuality and reliability working on previous jobs
- Flexibility and adaptability: Quick learner, easily adapting to new tools and priorities
- Autonomy and initiative: Experience living abroad, as well as professional experience in selflearning and complete independence

Interests

- Basketball: Practiced 15 years. Coached younger players and held a referee license
- Algorithmic: 5 years of practice in competitive programming. Finalist of the Prologin contest three times. Active on LeetCode and Advent of Code