Baptiste PRAS

Master student in Artificial Intelligence

Personal Website: https://baptistepras.fr/

EDUCATION

Artificial Intelligence Master

Paris, France

University Paris-Saclay

2025-2027

Computer Science Magister

Paris, France

University Paris-Saclay

2024-2025

 Followed a reinforced curriculum with advanced computer science courses and a focus on artificial intelligence and distributed algorithms

Dual Bachelor Degree in Computer Science and Mathematics

Paris, France

University Paris-Saclay

2022-2024

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

High School Baccalaureate

Rumilly, France

Démotz de la Salle High School

2020-2022

English School New-York, USA

EF New-York 2019-2020

Completed an intensive English immersion program, achieving C2 proficiency

PROFESSIONAL EXPERIENCE

Research Internship

Paris, France

LISN

May 2025 – July 2025

- Analyzed the performance of biomedical entity linking models on the BELB benchmark, with a focus on their generalization capabilities to complex or rare mentions
- Developed quantitative and visual analyses of dataset characteristics (mention length, ambiguity, frequency, etc.) to assess their impact on prediction quality
- Compared recent models (including BioSyn, GenBioEL, and ArboEL) and identified edge cases where certain approaches consistently over- or underperform

Supervised 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

PROJECTS

- NBA MVP Prediction Models: Implemented various models to predict the final MVP ranking based on player statistics, while also accounting for the human factors that influence voting decisions
- Spherical Teacher-Student Perceptron: Implemented in Python a spherical Teacher-Student perceptron, entirely hand-coded using only NumPy, to analyze various class imbalance scenarios in train and test sets
- <u>Image Classification:</u> Developed a machine learning model to recognize specific traffic signs using supervised learning algorithms. Extracted data from pictures, pre-processed it and trained several models on it. Reached a performance of over 95%
- <u>Java-like Interpreter:</u> Made an interpreter based on Java, supporting 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++; Database library in C++

SKILLS AND INTERESTS

Hard Skills

- Python: Advanced, proficient in NumPy, MatPlotLib, Pandas, Seaborn, Scikit-Learn
- C++/C: Advanced

- HTML, CSS, Processing: Familiar with
- Ocaml, Java, SQL: Intermediate
- Office Suite: Word, PowerPoint, Excel

Languages

• French: Native language

- Russian: Basic knowledge (A2)
- English: C2 proficiency TOEFL: 108/120
- German: Basic knowledge (A2)

Soft Skills

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

Interests

- <u>Basketball:</u> Practiced 15 years. Coached several teams and held a referee license
- Algorithmic: 5 years of practice in competitive programming. 3x finalist of the Prologin contest