Baptiste Pras

Master student in Artificial Intelligence

I am a Master's student in Artificial Intelligence at Université Paris-Saclay with a background in computer science, mathematics, and machine learning. Through research internships at LISN, I worked on biomedical entity linking and class imbalance analysis, combining rigorous experimentation with practical model improvements. Passionate about data science and AI applications, I also developed personal projects such as an NBA MVP prediction model and an award-winning Dual Sudoku AI agent. Curious, adaptable, and driven, I am eager to apply my skills to impactful challenges in industry.

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EDUCATION

Artificial Intelligence Master
University Paris-Saclay

09/2025 - Present
Paris, France

Computer Science Magister
University Paris-Saclay

09/2024 - 08/2025
Paris, France

Dual Bachelor Degree in Computer Science and Mathematics
University Paris-Saclay

09/2022 - 08/2024
Paris, France

English Program
EF New York

SKILLS

Python | C / C++ | Machine Learning | OCaml | Java | SQL | Teamwork | Flexibility | Autonomy | Leadership

LANGUAGES

French
Native

English
Bilingual Proficiency (TOEFL 108/120)

Russian
Elementary Proficiency

PROFESSIONAL EXPERIENCE

Research Internship
LISN - Laboratoire Interdisciplinaire des Sciences du Numérique

05/2025 - 08/2025 — *Paris, France*

- Analyzed biomedical entity linking models on the BELB benchmark, focusing on generalization to rare or complex mentions. Developed quantitative and visual analyses of dataset characteristics (mention length, ambiguity, frequency) and their impact on prediction quality. Compared recent models, identified consistent weaknesses, and proposed improvements; submitted a paper to an ACL conference.

Contact : Nona Naderi (LISN, Université Paris-Saclay) - Contact details available upon request.

Supervised Research Project
LISN - Laboratoire Interdisciplinaire des Sciences du Numérique

01/2025 - 05/2025 — *Paris, France*

- Studied the impact of class imbalance on classification tasks using a spherical Teacher-Student perceptron. Conducted experiments in Python (Scikit-Learn, NumPy, Matplotlib) with different noise levels, loss functions, and training methods (GD, Langevin dynamics). Demonstrated that the optimal imbalance ratio in training sets differs from 0.5 in class-imbalanced problems.

Contact : François Landes (LISN, Université Paris-Saclay) - Contact details available upon request.

Generative AI Trainer
Outlier

01/2025 - 08/2025 — *Remote*

- Designed and refined prompts to enhance the performance of generative AI models. Reviewed and corrected AI-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)
Carrefour Market

07/2021 - 08/2025 — *France*

- Shelf stocking, customer service, teamwork.

PROJECTS

NBA MVP Prediction Model
- Collected and cleaned player and team statistics from publicly available online sources to build a structured dataset. I performed feature selection and engineering, experimenting with different attribute selection strategies. Using several predictive models implemented with Scikit-Learn, I achieved an accuracy of **80.4% in predicting the actual MVP outcome.**

Dual Sudoku AI Agent
- Designed an artificial intelligence to solve and play Dual Sudoku by combining search algorithms and heuristic strategies. Implemented efficient state representation and evaluation functions to handle the game's combinatorial complexity.

Traffic Sign Recognition Model
- Developed a machine learning model to recognize traffic signs from pictures. Implemented preprocessing (normalization, resizing, feature extraction) and trained multiple supervised learning algorithms, reaching over **95% accuracy.**

Java-like Interpreter
- Built an interpreter supporting basic arithmetic, classes, methods, and Java-like type checking. Entirely coded in OCaml with Ocamllex and Menhir, demonstrating compiler design and type system implementation skills.

Other projects
- Developed several 2D games and simulations in Python, OCaml, Java, and C++ (e.g., Air Hockey, Labyrinth solver, Colt Express, Termite Battle).

ACHIEVEMENTS

Winner of an AI competition by designing the best-performing Dual Sudoku agent

3× Prologin finalist, a national algorithmic programming contest