

Nicolas Dassas-Henny | CV

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Computer Science student at ENS Rennes

Educational background

École Normale Supérieure de Rennes

Rennes

Master 1 - Computer Science

2024–2025

Courses taken: Semantics, Modeling and formal verification, Logic and knowledge representation, Complexity theory, Compilation, Signal processing, Operating systems, Machine learning, Seminars, English

École Normale Supérieure de Rennes

Rennes

License 3 - Computer Science

2023–2024

Courses taken: Logic, Formal languages, Algorithms, Programming language theory, Systems and networks architecture, Software engineering, Seminars, Pedagogy, Algebra, Statistics, English

Lycée Fenelon

Paris

*CPGE MPSI/MP**

2021–2023

Mathematics, Physics, Computer Science

Notable Experiences

Internships

IRIF

Paris

Automata, Logic

2024

2-month internship supervised by Sylvain Schmitz. Reduction from the provability of μMLL^∞ to a mixed parity/reachability condition on the executions of a BVASS (details in [this scientific report](#)).

IRISA - SPICY Team

Rennes

Logic, Proof Assistant

2024–2025

Project supervised by David Baelde, spread throughout the year (1 day per week), development of a circular proof system for bi-deduction in the cryptographic proof assistant [Squirrel](#).

Projects

LLM to fight conflicts of interest

Machine Learning, Law

2024–2025

Project with the association [Anticor](#). Development of an LLM answering questions from elected officials about potential conflicts of interest, providing sources (corpus created by the law department at ENS).

Sinfourmis Hackathon

Compilation, Swarm Algorithms

2023–2025

[Annual Hackathon](#) organized by the CS association at ENS Rennes. Creation of a compiler for a low-level assembler. Development of strategies for a two-player game where memoryless automata compete. Organization of the 2024–2025 edition with a [topic](#) on graph theory.

Creation of a Prolog interpreter

Programming Language Theory

2023

Creation, in OCaml, of an interpreter allowing automatic inference of values for variables and generating proof trees following a given set of rules.

TIPE - Modeling an interconnected autonomous vehicle system

Model Checking, Logic, Game Theory, Stochastic Processes

2022–2023

Development of a strategy modeling uncontrollable vehicles as opponents, calculating attractors, and application of the minimax algorithm with alpha-beta pruning to identify the optimal move. Work based on [this paper](#).

Competitive programming.....

ICPC South Western European Regional Contest (SWERC)

Algorithms

2023–2025

Representation of ENS Rennes at the SWERC in 2023/2024 and 2024/2025, an international algorithmic contest.

Teaching

Tutoring as part of the "cordées de la réussite" program

Lycée Descartes

Tutoring high school students in Computer Science, Mathematics, Physics, and Biology

2023–2024

Regular interventions in year 6

École Les Gantelles

Conducting unplugged computer science activities in elementary school

2023–2024

Pedagogy module at ENS Rennes

Skills

Advanced: OCaml, Git, $\text{\LaTeX}$

Intermediate: Python, C, C++

Languages

French: Native language

English: Fluent - C1, Cambridge Advanced certified since 2021