

Tess BRETON

Student at MVA | École Polytechnique



+33 6 17 04 20 18

SKILLS

Applied Mathematics
Statistics
Machine/Deep Learning

Python, R
LaTeX
Communication

LANGUAGES

French (native)
English (C2)
German (B2-C1)
Spanish (B1-B2)

CERTIFICATIONS

Linguaskill (C1 or above)
Cambridge University Press &
Assessment

TOEFL (107/120)
ETS

HOBBIES

Piano
Singing
Drawing
Swimming

PROFILE

MVA (Mathematics, Vision, Learning) master's student at ENS Paris-Saclay.
Looking for a research internship starting in April 2024.

STUDIES

- **MVA (Mathematics, Vision, Learning) Master 2**
École Normale Supérieure Paris-Saclay | September 2024 – Present
First semester courses: Convex Optimization, Computational Statistics, Probabilistic Graphical Models, Reinforcement Learning, Geometric Data Analysis, Optimal Transport and Object Recognition.
- **Cycle Ingénieur | École Polytechnique** | September 2021 – Present
France's leading engineering school. Specializing in Applied Mathematics. Courses in Statistics, Machine Learning, Operations Research and more. Degree to be awarded in 2025.
- **Classe préparatoire MP | Lycée Louis Le Grand** | 2019 – 2021
Intensive two-year high-level program to prepare for the competitive entrance exams to top French engineering schools.

WORK EXPERIENCE

- **Columbia University, Irving Institute for Cancer Dynamics (IICD)**
Research Intern | New York, United States | 4 months, summer 2024
Research internship supervised by Simon Tavaré and Khanh Dinh. Mathematical modeling and simulation of ecDNA dynamics in cancer cell populations. Moran process with selective pressure, ABC inference. Code available on GitHub.
- **GE HealthCare**
Data Scientist Intern | Buc, France | 3 months, summer 2023
Worked on evaluating the robustness of a Deep Learning algorithm for lung nodule detection on CT scan images. Python coding.
- **École Polytechnique**
Tutor | Palaiseau, France | 3 months, fall 2023
Tutoring third-year Bachelor students in Asymptotic Statistics.

PROJECTS

- **ENS Entrance Exam Project - Lycée Louis Le Grand - 2021**
Study of the Traveling Salesman Problem with Markov Chains and simulated annealing.