Tess BRETON

Student at MVA | École Polytechnique





C +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

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.