

APPLIED MATHEMATICS STUDENT FOR MODELING & SIMULATION

Looking for internship followed by PhD in modeling, simulation, optimization or scientific AI (available April 2026).

Fields :

Numerical methods (FVM, FEM, DGM) ; Scientific computing ; Data assimilation ; Scientific machine learning

Application:

CFD ; Shape optimization ; A posteriori estimation ; Inverse problem ; Uncertainty quantifications ; ROMs ; Digital Twins

EDUCATION

2024-2025 Paris, France	2nd year MSc Mathematical Modeling major PDEs and Data Science <i>Sorbonne Université (Highest Honours)</i>
2022-2026 Rennes, France	Trainee civil servant, Ecole Normale Supérieure de Rennes diploma Pure Mathematics, Theoretical physics Degrees / 1st year MSc Pure Mathematics <i>ENS Rennes, Université de Rennes</i>
2019-2022 Tours, France	CPGE Mathematics and Physics <i>Descartes Highschool</i>

EXPERIENCE

Nov 2025-Apr 2026 Shanghai, China (To come)	Shanghai Jiao Tong University <i>Subject to be defined on AI, Reduced Order Models and data assimilation.</i> Supervised by Helin GONG and Yvon MADAY	Research Internship
April-Sept 2025 Saclay, France	CEA Saclay <i>Discontinuous Galerkin Method and “a posteriori” error estimation.</i> Development on TrioCFD open source code based on TRUST. Supervised by Andrew PEITAVY and Erell JAMELOT	R&D Internship
Sept 2024-Ongoing Paris, France	IPESUP Optimal Sup-Spé Mathematical tutoring, tutorials and mock exams for scientific CPGE students, 4h every Saturday.	Teaching
May-August 2024 Pisa, Italy	Institute of Biorobotics, Sant’Anna Scuola Superiore <i>“A posteriori” error estimator for FVM-based Reduced Order Models in CFD.</i> Supervised by Giovanni STABILE, ERC StG Project DANTE (Urban climate virtual twin).	Research Internship
May-July 2023 Saclay, France	Laboratory of Theoretical Physics and Statistical Models, CNRS <i>Modeling, simulation and statistical analysis of branching stochastic processes.</i> Supervised by Alberto ROSSO. Collaboration with CEA Saclay.	Research Internship
May 2023 Angers, France	Chevroliier Highschool <i>Teaching maths in highschool and IT bachelors, mock exams for CPGE (ECT,PTSI).</i> Supervised by Simon BRIDONNEAU.	Teaching Internship

SOME RELEVANT COURSEWORK

Discontinuous Galerkin methods	PDE-constrained shape optimization	Approximation theory, Inverse problems	Scientific algorithms (GMReS, kNN, Quantum FFT)	Fluid-structure simulation for hemodynamics
Tensors methods for high-dimensional problems	Control in finite and infinite dimension	Machine learning	Gradients flow in machine learning theory	Martingales, Markov’ chains, Random processes

TECHNICAL SKILLS

French mother tongue	<u>Python</u> : Sklearn, Pytorch, Panda, Numpy	Critical thinking
English C1 (TOEIC 955/990)	MatLab, FreeFEM++	Fast learner
Basic knowledge of Italian, German	Notions of C++	Teamworking

MISCELLANEOUS

Volunteering	Donor for Solidarité Internationale Tutor for CPES SEnS Bachelors of Chateaubriand Highschool ENS Rennes BDE: events advisor and photograph ENS Rennes BDS: table tennis team manager Rendez-vous des Jeunes Mathématiciennes&Informaticiennes Rennes 2022 CPGE Descartes Student Association: Vice-President Chevroliier Highschool: Life Council representative student	Table tennis (+12 years) Wakeboard Photography Clarinet Motorbikes (owner of CB500F) Running
Student jobs	Maths and physics private teacher at Complétude (2023-2025) ICO Angers: Cleaning unit, Warehousman, Data processing (2019-2022) Farm work at Ferme CHAILLOUX (2016-2018)	