



Aldric Parent

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EDUCATION AND TRAINING

01/09/2024 – CURRENT Paris, France

MASTER IN SPACE SYSTEMS ENGINEERING (DUAL DEGREE) Paris Observatory - PSL University

- **1st Year (on going):** SUTS (Space Science and Technology). Elective courses : classical gravitation, physics of navigation satellite systems, space instrumentation, general astronomy, mathematics for aerospace, data processing, computer science.
- **2nd Year :** OSAE (Tools and Systems for Astronomy and Space). Specialization in space systems engineering.

Website <https://observatoiredeparis.psl.eu/?lang=fr> | **Field of study** Engineering, manufacturing and construction | **Level in EQF** EQF level 7

01/09/2022 – CURRENT Saint-Étienne, France

INGÉNIEUR CIVIL DES MINES (ICM) École des Mines de Saint-Étienne

- **1st Year :** Common core curriculum (maths, physics, computer science, management, environment, languages)
- **2nd Year :** Academic exchange at Bristol University (Aerospace Department)
- **3rd Year (on going) :** Dual degree with Paris Observatory - PLS University. Master's in Space Systems Engineering

Website <https://www.mines-stetienne.fr> | **Field of study** Engineering, manufacturing and construction | **Level in EQF** EQF level 7

01/09/2023 – 01/02/2024 Bristol, United Kingdom

STUDY ABROAD PROGRAMME - AEROSPACE DEPARTMENT Bristol University

Academic Semester Abroad

Elective courses : Thermodynamics, Simulation for aerospace, Introduction to space systems, Behavior of dynamic systems.

Website <https://www.bristol.ac.uk> | **Field of study** Engineering, manufacturing and construction | **Level in EQF** EQF level 6

01/09/2020 – 01/09/2022 Paris, France

CLASSE PRÉPARATOIRE AUX GRANDES ÉCOLES - CPGE Lycée Saint-Louis

Preparatory Classes for Entrance Exams to Engineering Schools

Admitted to the highly selective Mines-Ponts exams

Admission to the École des Mines de Saint-Étienne.

Website <https://lycee-saintlouis.fr> | **Level in EQF** EQF level 6

WORK EXPERIENCE

01/01/2025 – CURRENT Paris, France

SPACE ENGINEERING INTERN CENSUS (CENTRE POUR LES NANOSATELLITES EN SCIENCES DE L'UNIVERS) - PARIS OBSERVATORY - PSL

M1 Internship

- Re-design of the ground station of Paris Observatory created for communication with the observatory's nano-satellites. Connection and development of Docker containers to implement the various functions of the ground station: satellite tracking, antenna actuators, modulation and demodulation of received and transmitted signals, data processing.
- Development of the NanoSat Grid Network for sharing ground station equipment in France

01/09/2024 – 10/01/2025 Paris, France

NANOSATELLITE IMAGER CHARACTERIZATION PROJECT CENSUS (CENTRE POUR LES NANOSATELLITES EN SCIENCES DE L'UNIVERS) - PARIS OBSERVATORY - PSL

M1 Project

- Characterization of an imager for a nanosatellite. Precise determination of the performance of a camera provided by an industrial of the new space sector. Development of a procedure to obtain a spatial distribution of the offset, dark, and flat of the detector.
- Work on the photonic chain of the detector.

2nd Year Engineering Internship (equivalent to M1)

- Work on the Mars 2020 mission: Analyzing data from the Supercam (IRS) instrument on the Perseverance rover.
- Adjustment of radiative transfer models: Using the Bayesian MCMC method to estimate the mineralogical characteristics of Martian soils.
- Uncertainty quantification: Estimating errors and uncertainties of the results obtained from the transfer models.

01/09/2022 – 01/09/2023 Saint-Étienne, France
ROCKET CONSTRUCTION PROJECT MINES SPACE (STUDENT ASSOCIATION)

Personal Space Engineering Project

- Project manager for the C'Space student rocket launch competition (CNES & Planète Science).
- Developed skills in stability, trajectory calculations, payload sizing, and electronics.
- Applied knowledge in mechanics, physics, embedded electronics, programming, and project management.
- Rocket reached 650 meters, setting a category record with successful flight and data analysis.

Paris, France
RECIPIENT OF THE "BOURSE ESPACE" FONDATION AILES DE FRANCE

Recipient of a €3000 Scholarship for Funding a Student Rocket Project (C'SPACE)

Website <https://www.fondation-ailesdefrance.fr>

LANGUAGE SKILLS

Mother tongue(s): FRENCH

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2
SPANISH	C1	C1	B2	B2	B2
JAPANESE	A2	A2	A1	A1	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Programming Languages

PYTHON LANGUAGE | C LANGUAGE | BASH - SHELL | JAVA (basic)

Softwares

GPredict | Matlab/Simulik | Docker | Arduino | Solidworks (basic)

HOBBIES AND INTERESTS

Competitive Running and Competitive dancing

Finisher of the 10km, Paris Half Marathon, Lyon Half Marathon (1:30'03), SaintéLyon (31 km trail), Full Moon Trail (39km trail).
Competitive practice of various dances: Waltz, Quickstep, Tango, Cha-Cha-Cha, Rumba, Jive.

Pianist

Piano for 17 years, including 8 years at the music academy; composing my own pieces

Competitive dancing

Competitive practice of various dances: Waltz, Quickstep, Tango, Cha-Cha-Cha, Rumba, Jive