

MATHILDE GUITTON



I am a french student in aeronautics and aerospace engineering. My ambition is to acquire large skills in fields linked to the space future, to become an astronaut.

18| 09| 2001|
// 22 years old

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// Driver's license

Professional experience

Intern in cosmology, Jet Propulsion Laboratory, NASA _ april - august 2024 _ Pasadena

Development of advanced signal separation techniques, using neural networks and Bayesian frameworks for the detection of CMB B modes, unique signatures of inflation in the primitive universe

Company & engineering project, Hinfact _ september 2023 - march 2024 _ Toulouse

Development of a method for objectively evaluating the pilot's observable behaviour (defined in the regulations of the Evidence Based-Training)

Intern in System Engineering, European Space Agency _march - august 2022 _ Noordwijk

Development of simulation software for analyzing and calibrating Proba-3 mission flight training (mission to validate satellite formation and study the solar crown)

Vice president Supaero Space Section _ 2021 - 2022 _ Toulouse

Management of 80 members and different poles, as well as sponsors (Thalès, CNES, PwC, ArianeGroup) and partnerships (ONERA)

Telecom Pole of the Æther project: supersonic rocket project with hybrid engine

Languages

French : native
English : C1 (TOEFL)
German : DSD1 2014
Russian : basics

Programming

// Python
// Java
// C
// Matlab
// SQL
// GMAT (NASA)

IT

// Microsoft 365
// Patran, Nastran

Academic training

Observatoire de Paris, University degree in Planetology _ 2023 - 2024 _ Paris

Formation of planets, small bodies, planetary surfaces, atmospheric dynamics

Politecnico di Milano, Erasmus Aerospace Master_ september 2022 - february 2023 _ Milan

Spacecraft Attitude Dynamics, Spacecraft Guidance and Navigation, Satellite Communication and Positioning Systems, High-tech Startups and Scaling up

ISAE-SUPAERO, Aeronautical and Aerospace Engineering degree _ 2020-2024 _ Toulouse

Major: Earth Observation and Universe Sciences

Advanced celestial mechanics, Fluid mechanics, Astrophysics, Stellar physics, Planetary systems, Architecture of space systems, Measurement physics and instrumentation, Big Data and Cloud, Neuro-IA

Lycée Saint-Louis, Preparatory class PCSI, PC, PC* _ 2017 - 2020 _ Paris

Intensive preparation in mathematics, physics, chemistry for the national entry competitions of engineering schools

Interests

Piano: Conservatoire Musica (2005 -2016), Claude Kahn Competition (2016)

Sports: Viet Vo Dao, equitation (10 years of practice), rugby

Travels: USA, Japan, Brazil, Europe, 4-month journey in South-East Asia, including 2 solo, to write a dystopian novel

Sauveurs en herbe: Secretary general of the association whose objective is to teach first aid to primary school children. sauveursenherbe.fr