

Guillaume ASTRUC

PhD Student

Imagine - LIGM / LASTIG

ENPC / IGN

☎ (+33) 646860139

✉ guillaume.astruc@enpc.fr

🌐 My Webpage

🐙 Github

in LinkedIn

🐦 Twitter



Education

- 2023–present **PhD, Computer Science & Engineering**, *ENPC/IGN*, Paris.
Subject: Self-supervised cross-modal geospatial learning
Advisors: Loic Landrieu, Nicolas Gonthier and Clément Mallet
- 2021–2022 : **Master Data Science**, *Institut Polytechnique de Paris*, Palaiseau, France.
- 2018–2022 : **Engineering school**, *ENSAE Paris*, Palaiseau, France, Graduated statistician-economist engineer.

Academic Activities

Publications

- 2024 **Guillaume Astruc, Nicolas Gonthier, Clement Mallet, Loic Landrieu**, AnySat: An Earth Observation Model for Any Resolutions, Scales, and Modalities, *ArXiv 2024*.
- 2024 **Guillaume Astruc, Nicolas Gonthier, Clement Mallet, Loic Landrieu**, OmniSat: Self-Supervised Modality Fusion for Earth Observation, *ECCV 2024*.
- 2024 **Guillaume Astruc, Nicolas Dufour, Ioannis Siglidis, Constantin Aronssohn, Nacim Bouia, Stephanie Fu, Romain Loiseau, Van Nguyen Nguyen, Charles Raude, Elliot Vincent, Lintao XU, Hongyu Zhou, Loic Landrieu**, OpenStreetView-5M: The Many Roads to Global Visual Geolocation, *CVPR 2024*.

Teaching

- 2025 **Teacher**, *Deep Learning for Remote Sensing*, ENSG.
◦ Deep Learning for Temporal Data
- 2025 **Teaching Assistant**, *Introduction to Data Science*, ENPC.
◦ Statistical Inference
◦ Linear and Logistic Regression Models
◦ PCA
◦ Clustering
◦ Validation and Regularization
◦ Introduction to Deep Learning
- 2025 **Teaching Assistant**, *Deep Learning for Remote Sensing*, ENSG.
◦ Intro to Deep Learning
◦ Deep Learning for Multispectral Images
◦ Deep Learning for 3D Data
- 2024 **Teaching Assistant**, *Deep Learning for Remote Sensing*, ENSG.
◦ Intro to Deep Learning
◦ Deep Learning for Multispectral Images
◦ Deep Learning for 3D Data
◦ Deep Learning for Temporal Data
- 2024 **Teaching Assistant**, *Machine Learning*, ENSG.
◦ Supervised Learning
◦ Classification

Reviewing

2024 **Reviewer for EarthVision (CVPRW) 2024.**

Recent open-source repositories

132 ★, 11 📄  **gastruc/osv5m**, *Owner*.

56 ★, 2 📄  **gastruc/omnisat**, *Owner*.

0 ★, 0 📄  **gastruc/anysat**, *Owner*.

Research Experience

2022 – ***Unsupervised Re-Identification for child-clinician recognition for Autism behaviour detection***, INRIA, Sophia-Antipolis, France.
6 months

Advisor : **Dr. François Bremond**, *Research Director*, Sophia-Antipolis, France ([Personal Webpage](#))

2021 – ***"Deep reinforcement learning and deep learning 3D point cloud classification"***, ONERA, Palaiseau, France.
6 months

Advisor : **Dr. Adrien Chan Hon Tong**, *Researcher*, Palaiseau, France ([Personal Webpage](#))

2020 – ***"Multi-temporal data and segmentation from satellite imagery to create a macroeconomic indicator"***, QuantCube Technology, Paris, France.
6 months

2020 – ***"Robust estimation of the mean by a Median-of-Means approach and Tukey depth"***, CREST, Palaiseau, France.
3 months

Advisor : **Prof. Guillaume Lécué**, *Professor*, Cergy, France ([Personal Webpage](#))

Miscellaneous

Research Interests

- Computer Vision
- Self-supervised learning
- Cross-modal learning
- Remote Sensing
- Foundation models

Languages spoken

French, *Native*

English, *Fluent*, C1

German, B2

Associative Commitments

2024-2026 Member of the PUC Running Bureau

2019-2020 Vice-President of the ENSAE
Student Office

2019-2020 Member of the ENSAE
Sports Bureau