

Guillaume ASTRUC

PhD Student

Imagine - LIGM / LASTIG

ENPC / IGN

✉ (+33) 646860139

✉ guillaume.astruc@enpc.fr

My Webpage

Github 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,
6 months Palaiseau, France.

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"***,
3 months CREST, Palaiseau, France.

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

Miscellaneous

Research Interests

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

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

Languages spoken

French, Native

English, Fluent, C1

German, B2