Guillaume ASTRUC

PhD Student

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 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

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- Deep Learning for 3D Data
- Deep Learning for Temporal Data

2024 **Teaching Assistant**, *Machine Learning*, ENSG.
- Supervised Learning
- Classification

Reviewing

2024 **Reviewer for Computer Vision and Pattern Recognition (CVPR) 2025**.

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 detec-**
6 months **tion**, *INRIA*, Sophia-Antipolis, France.

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**
6 months **indicator"**, *QuantCube Technology*, Paris, France.

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

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