

Martina Pastorino

Assistant Professor

EDUCATION AND TRAINING

2023

Joint Ph.D. in Science and Technologies for Electronic and Telecommunication Engineering and in Sciences et Technologies de l'Information et de la Communication

Probabilistic graphical models and deep learning methods for remote sensing image analysis, *excellent cum laude*

University of Genoa – Genoa – IT

INRIA, Université Côte d'Azur – Sophia Antipolis – FR

2020

Joint Master Degree in Internet and Multimedia Engineering and in Signal Image Systèmes Automatique (Master SISEA, Université de Rennes I), Major in Mathematical and Computational Engineering

A Novel Method for Semantic Segmentation of Remote Sensing Images Combining Hierarchical Probabilistic Graphical Models and Deep Convolutional Neural Networks, 110 *cum laude “worthy of publication”*

University of Genoa – Genoa – IT

IMT Atlantique (Grande École Mines-Télécom) – Brest – FR

2018

Bachelor's degree (B.Sc.) in Electronic Engineering and Information Technology

Regularization Methods for Image Restoration, 110 *cum laude*

University of Genoa – Genoa – IT

PROFESSIONAL HISTORY

2024 – ONGOING

Assistant Professor

University of Genoa – Genoa – IT

2024 – ONGOING

External collaborator

INRIA, Université Côte d'Azur – Sophia Antipolis – FR

2023 – 2024

Post-doctoral Research Fellow

University of Genoa – Genoa – IT

INRIA, Université Côte d'Azur – Sophia Antipolis – FR

EXPERIENCE

MAIN SEMINARS

2024 Probabilistic graphical models and deep neural networks for remote sensing image analysis

INRIA Grenoble – Grenoble – FR

2024 Probabilistic graphical models and deep neural networks for remote sensing image analysis

INRIA/INRAE Université de Montpellier – Montpellier – FR

2022 Stochastic models and deep-learning methods for remote sensing image analysis

Université Bretagne Sud – Vannes – FR

2022 Semantic Segmentation of Remote Sensing Images through Fully Convolutional Neural Networks and Hierarchical Probabilistic Graphical Models

INRIA, Sophia Antipolis – Sophia Antipolis – FR

TEACHING OR RESEARCH POSITIONS (FELLOWSHIPS) AT FOREIGN UNIVERSITIES AND RESEARCH INSTITUTES

2023-2024 Post-doctoral Research Fellow

INRIA, Université Côte d'Azur – Sophia Antipolis – FR

PRIZES AND ACCOLADES FOR SCIENTIFIC ACTIVITY, INCLUDING MEMBERSHIP OF ACADEMIES

2021 IEEE GRSS Mikio Takagi Student Prize

Best Student Paper Award at the IEEE International Geoscience and Remote Sensing Symposium, IGARSS, 2021

IEEE Geoscience and Remote Sensing Society (GRSS)

2021 IEEE GRSS Master Thesis Prize

Italian Chapters of the IEEE Geoscience and Remote Sensing Society (GRSS)

2021 Prix d'excellence

Université Côte d'Azur – Nice – FR

2024 Best Project Award

EURASIP – IEEE SPS Summer School on Remote Sensing and Microscopy Image Processing

2024 Best PhD thesis prize

Ecole Doctorale STIC, Université Côte d'Azur – Nice – FR

2025 IEEE GRSS PhD Thesis Prize

Italian Chapters of the IEEE Geoscience and Remote Sensing Society (GRSS)

RESEARCH INTEREST

Martina Pastorino's research activity focuses on developing novel image processing and pattern recognition methods for analyzing remote sensing images. In particular, her work explores the integration of deep learning with stochastic probabilistic graphical models. Within this framework, she has devoted particular attention to two research directions closely related to semantic segmentation (or dense image classification) of remote sensing data: obtaining accurate results with (i) input multimodal imagery and (ii) scarce ground truth information.