

Curriculum Vitae: Federico Figari Tomenotti

Personal information



Position preferred: -

Work Experience

January 2023 – March 2023

VISITING RESEARCHER at *Imagine Lab at Ecole des Ponts, Paristech*

Supervisor: prof. Gul Varol

Main topic: Semantic Action Anticipation and Prediction using deep learning architectures.

2022 Academic Year 2022-23

TEACHING ASSISTANT at *DIBRIS Università degli Studi di Genova*, courses:

- *Advanced Machine Learning, at the Msc in Computer Science (20 hours)*
- *Fondamenti dell'elaborazione di Segnali ed Immagini (Signal and Image Processing), at the Bsc in Computer Science (10 hours)*

2021 Academic Year 2021-22

TEACHING ASSISTANT at *DIBRIS Università degli Studi di Genova*, course:

- *Algoritmi e Strutture Dati (Algorithms and Data Structure), at the Bsc in Computer Science (40 hours)*

November 2020 – Present

PHD STUDENT IN MACHINE LEARNING & COMPUTER VISION at *Machine Learning Genoa Center (MaLGA)*

PhD in Computer Science at *Università degli Studi di Genova*

Supervisor: prof. Nicoletta Noceti

Main topic: human motion understanding, and human activity recognition-prediction with cognitive methods.

Other topic of interests: graph networks, representations in machine learning

July 2020 – November 2020

ICT SOLUTION ARCHITECT PRE-SALES & DELIVERY at *TIM, Gruppo Telecomitalia*. - Genova, Italy

Activities: Full Time, permanent.

Activities: IT Project Engineer focused on Cloud solution, Cloud design and migration.

Role: Pre-sales design of customised IT solutions.

September 2019 – December 2019

ERASMUS+ RESEARCH INTERNSHIP at *UiT The Arctic University of Norway*. - Tromsø, Norway.

Thesis research: Remote sensing for Earth Observation, deep learning.

Thesis: "*Heterogeneous Change Detection on Remote Sensing Data*".

Activities: problem formulation, code developing and experiments, submission of research paper at IGARSS₂₀₂₀

September 2017

UNDERGRADUATE INTERNSHIP at *OnAir srl*, Genoa Italy.

Activities: Matlab coding for a case study problem on operative research.

Sector: R&D, machine learning, artificial vision, operative research.

Education

September 2017 – March 2020

MASTER'S DEGREE IN TELECOMMUNICATIONS ENGINEERING awarded cum laude (grade 110 lode/110) (LM-27): Multimedia and Internet Engineering. *Università degli Studi di Genova*.

Erasmus+ Internship at UiT The Arctic University of Norway.

Thesis: Heterogeneous Change Detection on Remote Sensing Data with Self-Supervised Deep Canonically Correlated Autoencoders ([link to thesis](#))

Main subjects covered in Master:

- Image Processing and Recognition
- Remote Sensing and Satellite Images
- Mathematical methods and Operations Research
- Cognitive Telecommunication Systems

Extra Modules in Master:

- International Development Cooperation
- Public Speaking: public and business communication

September 2014 – October 2017

BACHELOR'S DEGREE IN ELETRONICS ENGINEERING awarded cum laude (grade 110 lode/110): (L-8) Electronics Engineering and Information Technology. *Università degli Studi di Genova*.

September 2016 – December 2016 Erasmus+ at University College Cork, Ireland.

Personal Skills

Languages: Italian, English (C1, Cambridge Advanced in English Certificate), French (base user).

Application software: Microsoft Office Suite, Matlab.

Programming languages: Assembly, C, C++, C#, Python, Matlab, (TensorFlow, Keras, Pytorch).

Software and Hardware: Arduino (or microcontroller) implementation, Linux user.

Communication: Good communications skills acquired in teamwork in university's projects and working as a private teacher for high-school students.

Organisational skills: Optimal organisational skills acquired planning and organising trips, voyages and activities for groups of 30/50 people as head of volunteers in parish activities. Knowledge of organising my own work, which has always been reflected in my student life scheduling exams and internships, completing all on time.

Publications

Tomenotti, F. F., Luppino, L. T., Hansen, M. A., Moser, G., & Anfinen, S. N. (2020). Heterogeneous change detection with self-supervised deep canonically correlated autoencoders. In *IGARSS 2020-2020 IEEE International Geoscience and Remote Sensing Symposium* (pp. 680-683). IEEE.

Cantarini, G., Tomenotti, F. F., Noceti, N., & Odone, F. (2022). HHP-Net: A light Heteroscedastic neural network for Head Pose estimation with uncertainty. In *Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision* (pp. 3521-3530).

Conference Presentations

WACV2022 - HHP-Net: A light Heteroscedastic neural network for Head Pose estimation with uncertainty.

Reviewer for:

- Pattern Recognition Journal, Elsevier
- Transactions on Geoscience and Remote Sensing Journal, IEEE

Lectures:

2-hours lecture at Maia (Microsoft Artificial Intelligence Academy): "Applications: motion analysis"

Prizes

"Premio Nazionale di Laurea "Eugenio Zilioli" - 16a Edizione (2020)" - Best Italian Master Thesis in

Remote Sensing, edition 2020.

Interests and hobbies

Volunteering with homeless and children
Science enthusiast
Green economy lover

Photography and editing
Trekking and sports lover
Timekeeper at FICr