Leonardo Saraceni

[01/11/2022 – Current]   **Ph.D. program in ENGINEERING IN COMPUTER SCIENCE**

Sapienza University of Rome - Department: computer, automatic and management engineering   https://phd.uniroma1.it/web/ENGINEERING-IN-COMPUTER-SCIENCE_nD3514_EN.aspx

Address: Via Ariosto, 25, 00185, Rome, Italy | | **Level in EQF:** EQF level 8

[01/09/2019 – 17/01/2022]   **Master of Science in Artificial Intelligence and Robotics**

Sapienza University of Rome - Department: computer, automatic and management engineering   https://corsidilaurea.uniroma1.it/it/corso/2020/30431/home

Address: Via Ariosto, 25, 00185 , Rome, Italy | **Field(s) of study:** Computer Engineering ; Control Engineering ; Computer Science | **Final grade:** 110 & Lode | **Level in EQF:** EQF level 7 | **Type of credits:** ECTS | **Number of credits:** 120

[31/08/2016 – 25/07/2019]   **Bachelor degree - Biomedical engineering**

Marche Polytechnic University - Department of Information Engineering
https://www.univpm.it/Entra/

Address: Via Brecce Bianche, 12, 60131 , Ancona, Italy | **Field(s) of study:** Electronic Engineering ; Biomedical Engineering | **Final grade:** 105 | **Level in EQF:** EQF level 6 | **Type of credits:** ECTS | **Number of credits:** 180 | **Thesis:** Acquisition of the photoplethysmographic signal (PPG) and classification activities

PUBLICATIONS

[2023]   **AgriSORT: A Simple Online Real-time Tracking-by-Detection framework for robotics in precision agriculture**

Reference: arXiv preprint arXiv:2309.13393

Authors: **Leonardo Saraceni**, Ionut M Motoi, Daniele Nardi, Thomas A Ciarfuglia

(Accepted and presented to ICRA 2024)

[2023]   **Weakly and semi-supervised detection, segmentation and tracking of table grapes with limited and noisy data**

Reference: Computers and Electronics in Agriculture 205, 107624

Authors: Thomas A. Ciarfuglia, Ionut M. Motoi, **Leonardo Saraceni**, Mulham Fawakherji, Alberto Sanfeliu, Daniele Nardi

[2022]   **Pseudo-Label Generation for Agricultural Robotics Applications**

Reference: Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, 1686-1694, 2022

Authors: Thomas A. Ciarfuglia, Ionut M. Motoi, **Leonardo Saraceni**, Mulham Fawakherji, Alberto Sanfeliu, Daniele Nardi

[2020]   **Dataset from PPG wireless sensor for activity monitoring**

Reference: Data in brief 29, 105044

Authors: Giorgio Biagetti, Paolo Crippa, Laura Falaschetti, **Leonardo Saraceni**, Andrea Tiranti, Claudio Turchetti

[2024]	**[Evaluating the Efficacy of Cut-and-Paste Data Augmentation in Semantic Segmentation for Satellite Imagery](#)**

Ionut M. Motoi, **Leonardo Saraceni**, Daniele Nardi, Thomas A. Ciarfuglia

WORK EXPERIENCE

[01/02/2023 – 30/06/2023]	**Teaching Activity - Bachelor degree "Engineering in Computer Science"**

Sapienza University of Rome

City: Rome | **Country:** Italy

[01/02/2022 – 01/06/2022]	**Scholarship "Automatic simulation and planning for person-robot collaboration systems"**

Sapienza University of Rome

City: Rome | **Country:** Italy

[09/06/2019 – 09/07/2019]	**Curricular internship "Signal Processing of Photoplethysmogram (PPG)"**

Marche Polytechnic University

City: Ancona | **Country:** Italy

PROJECTS

[01/08/2021 – Current]	**Task 4.3 for European Project Canopies (H2020)**

Working on Task 4.3 of [CANOPIES](#) european project - Detection, Tracking, Mapping, Quality estimation from stereo camera. Working on Integration of Human Robot Interaction and Perception algorithms on Nvidia Jetson Orin.

SKILLS

Technical Skills

Software Development:

- Python, C++

Artificial Intelligence + Computer Vision:

- Tensorflow, Pytorch, OpenCV

Robotics:

- ROS proficient, CoppeliaSim, Matlab

Assembly:

- Micro-controllers (PIC16F84A)

Version control:

- Git, Github

Web Development & WebGL

- JavaScript, HTML, CSS
- WebGL, BabylonJS, ThreeJS

Docker

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 **READING** C1 **WRITING** C1

SPOKEN PRODUCTION C1 **SPOKEN INTERACTION** C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user