

Personal details

Contacts

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> Google Scholar: Simone Felicioni

> > ORCID:

0000-0003-0978-0632

Place and date of birth

Spoleto, Perugia (Italy) 03/06/1994

Nationality

Italian

Simone Felicioni

Education

2024

PhD in Industrial and Information Engineering

University of Perugia

Thesis: "Vision-based Robot Localization: from model-based and data-

driven strategies to topological approaches"

Supervisor: Prof. Gabriele Costante

2020

Master's Degree in Computer Science and Robotics Engineering – Robotics curriculum

University of Perugia

Thesis: "Analysing social interactions through a wearable camera: a first-

person point of view"

Supervisor: Prof. Gabriele Costante Advisor: Dr. Mariella Dimiccoli Final grade: 110/110 cum laude

2017

Bachelor's Degree in Computer Science and Electronics Engineering – Computer Science curriculum

University of Perugia

Thesis: "Implementation of a mobile robot and experiments on policies

for autonomous driving based on Computer Vision algorithms"

Supervisor: Prof. Paolo Valigi

2013

High School Diploma

Scientific High School Alessandro Volta, Spoleto (PG)

Experience

February 2024 - current

Research Fellow

Department of Engineering, University of Perugia, Italy

Research activities on Robotics, Computer Vision, and Machine Learning.

November 2020 - January 2024

Research Assistant

Department of Engineering, University of Perugia, Italy

Support in research, teaching, and co-supervision of thesis activities.

November 2022 - May 2023

Research Intern

Technology Innovation Institute, Abu Dhabi, United Arab Emirates Internship in the Autonomous Robotics Research Center.

September 2020 - November 2020

Research Intern

Institut de Robòtica i Informàtica Industrial, Barcelona, Spain Research activity funded by the "MdM Unit of Excellence" program.

October 2019 - February 2020

Erasmus+ Traineeship

Institut de Robòtica i Informàtica Industrial, Barcelona, Spain Internship in the Perception and Manipulation Lab.

Language Skills

Italian (Mother tongue)•••••English (Advanced)•••••Spanish (Intermediate)•••••

Certifications

2022

English exam (B2 level) University of Perugia

2018

English exam (C1 level) *University of Perugia*

2013

First Certificate in English (FCE)
University of Cambridge ESOL Examinations

Awards and Grants

2024

Research grant winner "Development of innovative model-based and data-driven solutions for modeling, control, supervision, and diagnostics of systems based on MEMS sensors and actuators"

University of Perugia

2020

Grant winner for the PhD in Industrial and Information Engineering University of Perugia

Grant winner for post-degree research activity "Data-driven predictive models for agriculture applications"

University of Perugia

First place at the "Pegaso 2000" degree award for the best thesis in Computer Science Engineering and digital technologies

University of Perugia – Pegaso 2000, Corciano (PG), Italy

Grant winner for research activity "IRI-MdM International Internship Programme"

Institut de Robòtica i Informàtica Industrial, Barcelona, Spain

Reviewer Activities

Conferences

- IEEE International Conference on Robotics and Automation (ICRA)
- IEEE International Conference on Intelligent Robots and Systems (IROS)
- International Conference on Computer Vision Theory and Applications (VISAPP)
- ACM International Conference on Multimedia (ACMMM)
- IEEE International Conference on Automation Science and Engineering (CASE)

Journals

- IEEE Robotics and Automation Letters (RA-L)
- IEEE Transactions on Automation Science and Engineering (T-ASE)
- IEEE Access

Workshops

 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)

Affiliations

IEEE Robotics and Automation Society Membership IEEE Young Professionals

Conferences, Summer schools, and Workshops

2024

IEEE International Conference on Automation Science and Engineering (CASE)

Bari, Italy

IEEE International Conference on Intelligent Robots and Systems (IROS) Abu Dhabi, United Arab Emirates

2022

IEEE RAS Summer School on Multi-Robot Systems

Czech Technical University, Prague, Czech Republic

4th Italian Conference for Robotics and Intelligent Machines (I-RIM) *Rome, Italy*

2021

20th International Conference on Advanced Robotics (ICAR) *Ljubljana, Slovenia*

Publications

2024

Vision-based Topological Localization for MAVs

Felicioni, S.; Rizzo, B.; Tortorici, C.; Costante, G.; IEEE Robotics and Automation Letters (RA-L), 1158-1165

D-VAT: End-to-End Visual Active Tracking for Micro Aerial Vehicles *Dionigi, A.; Felicioni, S.; Leomanni, M.; Costante, G.*; IEEE Robotics and Automation Letters (RA-L), 1-8

Integrating Occupancy Grid with Semantic Road Information for Autonomous Navigation in Urban Scenarios: A Benchmark Study Felicioni, S.; Burani, E.; Leomanni, M.; Fravolini, M. L., Valigi, P.; Costante, G.; 2024 IEEE 20th International Conference on Automation Science and Engineering (CASE), 2665-2671

2023

ARD-VO: Agricultural Robot Dataset of Vineyards and Olive groves Crocetti, F.; Bellocchio, E.; Dionigi, A.; Felicioni, S.; Costante, G.; Fravolini, M.L.; Valigi, P.; Journal of Field Robotics, 1678-1696

A Benchmark Analysis of Data-driven and Geometric Approaches for Robot Ego-Motion Estimation

Legittimo, M.; Felicioni, S.; Bagni, F.; Tagliavini, A.; Dionigi, A.; Gatti, F.; Verucchi, M.; Costante, G.; Bertogna, M.; Journal of Field Robotics, 1-29

MA-VIED: A Multisensor Automotive Visual Inertial Event Dataset Mollica, G.; Felicioni, S.; Legittimo, M.; Meli, L.; Costante, G.; Valigi, P.; IEEE Transactions on Intelligent Transportation Systems

2021

GOLN: Graph Object-based Localization Network

Felicioni, S.; Legittimo, M.; Fravolini, M.L.; Costante, G.; 2021 20th International Conference on Advanced Robotics (ICAR), 849-856

InteractionGCN: A Graph Convolutional Network based framework for social interaction recognition in egocentric videos

Felicioni, S.; Dimiccoli, M.; 2021 IEEE International Conference on Image Processing (ICIP), 2348-2352