

ALL. B

Decreto Rettore Università di Roma "La Sapienza" n. 1345/2024 del 13.06.2024

FABIO GALASSO

Curriculum Vitae ai fini della pubblicazione

Part I – General Information

Full name: Fabio Galasso
E-mail: galasso@di.uniroma1.it, fabio.galasso@gmail.com
Personal website: <https://fgalasso.bitbucket.io/>
Group website: <https://www.pinlab.org/>
Google scholar: <http://scholar.google.de/citations?user=2gSuGBEAAAAJ>
LinkedIn: <https://www.linkedin.com/in/fabio-galasso-61141b32>
X-Twitter: <https://x.com/GalassoFab10>
Scopus: <https://www.scopus.com/authid/detail.uri?authorId=23396411100>
ORCID: <https://orcid.org/0000-0003-1875-7813>
Spoken languages: fluent English, Italian and Spanish;
advanced German, intermediate French

Part II – Education

10 / 2005 – 3 / 2009 **University of Cambridge, UK**
PhD in engineering
Image processing and computer vision
Research: shape-from-texture, spectral distortion analysis, 3-D reconstruction

9 / 1998 – 5 / 2004 **RomaTre University, Italy**
Laurea in electrical engineering (equiv. BA+MA)
Signal processing for telecommunications
110/110 cum laude

9 / 1993 – 7 / 1998 **Liceo Scientifico "S. Cannizzaro", Italy**
Diploma (secondary school)
60/60

Part III – Professional Experience

III A – Academic career

Since 9 / 2019

Sapienza University, Italy

Head of the Perception and Intelligence Lab (PIN lab)
Fundamental research and innovation transfer in computer vision and machine learning, distributed and multi-agent intelligent systems, perception (detection, recognition, re-identification, forecasting) and general intelligence (reasoning, meta-learning, domain adaptation), within sustainable (low-power-consumption and constrained-computational-resource sensors and devices) and interpretable (interpretable and verifiable AI) frameworks.

Web: www.pinlab.org

Since 9 / 2022

Sapienza University, Italy

Associate Professor

9 / 2019 – 8 / 2022

Sapienza University, Italy

Tenure-Track RTD-B Professor (art. 24 c.3-b L. 240/10)

10 / 2011 – 8 / 2014

Max Planck Institute for Informatics, Germany

Post-doctoral researcher

Research: machine learning and computer vision, video/motion analysis and segmentation, clustering, human pose estimation, representation learning on graphs, spectral graph theory

Advisor: Prof. Bernt Schiele

4 / 2009 – 8 / 2011

University of Cambridge, UK

Post-doctoral researcher

Principal co-investigator of research for the Panasonic Corp.

Research: computer vision and machine learning, video/motion analysis and segmentation, clustering, people detection

Advisor: Prof. Roberto Cipolla

III B – Industrial career

Since 1 / 2024

ItalAI S.r.l. a Sapienza Start-up

Co-Founder and CTO

- *Creation and acceleration of new AI businesses, based on advanced machine learning, computer vision, and natural language processing*
- *Applied research, partnering, and exploring product-market-fit and vertical of each technology.*

Web: <https://italailabs.com/>

9 / 2014 – 7 / 2019

OSRAM, Germany

Head of the Computer Vision Department, Corporate R&D

- *R&D for AI and smart lighting, roadmap and strategic planning*
- *Project and department lead, cost-center management*
- *Supervision of staff scientists, post-docs and PhD students*

Main achievements:

- ✓ Attraction of ~2.8 million EUR public funding (EU, German gov.)
- ✓ Team growth from 0 to 12 staff members (+8 working students)
- ✓ Creation of IT computational server infrastructure
- ✓ Prototype and innovation transfer to pilots (incl. Edeka, City of Ulm, Apleona, Vodafone, Commerz Real)
- ✓ Creation of 1 product (VISN) recipient of international awards

12 / 2004 – 8 / 2005

Telecom Italia, Italy

Senior assistant to specialist engineering activities

9 / 2003 – 5 / 2004

Ericsson, Italy

Intern, MA thesis preparation

Part IV – Teaching Experience, Supervision and Academic Appointments

IV A – Courses at universities

Since	2 / 2020	Lecturer, M.Sc. in Data Science, Sapienza University “Advanced Machine Learning” (6 CFU)
Since	9 / 2024	Lecturer, B.Sc. in Applied Computer Science and Artificial Intelligence, Sapienza University “Artificial Intelligence and Machine Learning – Unit I” (6 CFU)
Since	9 / 2024	Lecturer, M.Sc. in Data Science, Sapienza University “Fundamentals/Foundations of Data Science” (3 CFU)
	09 / 2024	Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of Leonardo Company S.p.A.
	07 / 2024	Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of KPMG S.p.A.
9 / 2019	8 / 2024	Lecturer, M.Sc. in Data Science, Sapienza University “Fundamentals of Data Science and Laboratory” (9 CFU)
	09 / 2023	Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of Advant S.r.l.
	07 / 2023	Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of Amazon AWS
	09 / 2022	Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of Leonardo Company S.p.A.
	07 / 2022	Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of Poste Italiane S.p.A.
	09 / 2021	Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of Google
	07 / 2021	Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of Unicredit S.p.A.
	09 / 2020	Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of Google

- 07 / 2020 Organizer of the Training Camp at the M.Sc. in Data Science, Sapienza university, (equiv. 1.5 CFU) with the industrial collaboration of [Poste Italiane S.p.A.](#)
- 1 / 2011 – 8 / 2014 Teaching assistant of the course “High Level Computer Vision”
University of Saarland
- 3 / 2011 – 8 / 2014 Guest lecturer at the course “High Level Computer Vision”
University of Saarland
- 9 / 2009 – 3 / 2011 Guest lecturer at the course “Computer Vision”
University of Cambridge
- 9 / 2006 – 3 / 2008 Teaching assistant at the course “Signal and Image Processing”
University of Cambridge

IV B – Selected Invited Talks

- 27 / 6 / 2024 “Challenges and Opportunities in modern AI”
At the Business and Management program
Banca del Fucino, Rome, Italy
- 18 / 1 / 2024 “Applications of AI to Earthquake Physics: Learning Fault Slip
and Precursors to failure to Advance Earthquake Prediction”
At Google DeepMind
- 17 / 6 / 2023 “Learning representations with uncertainty with hyperbolic neural
networks and interpreting the hyperbolic radius”
At the Area Chair Workshop of the IEEE/CVF Int. Conference of
Computer Vision and Pattern Recognition (CVPR),
Vancouver, British Columbia, Canada
- 14 / 6 / 2023 “Learning human motion with uncertainty for forecasting,
anomaly detection and action recognition”
At the University of California, Berkeley (UC Berkeley), CA, USA
- 12 / 6 / 2023 “Learning human motion with uncertainty for forecasting,
anomaly detection and action recognition”
At Stanford University, CA, USA
- 26 / 4 / 2023 “Learning human motion with uncertainty for forecasting,
anomaly detection and action recognition”
At the Italian Institute of Technology (IIT), Genoa, Italy
- 4 / 4 / 2023 “Machines that learn from the future”
Workshop on artificial intelligence, organized at Tiburtina Station
(Casa delle Tecnologie Emergenti -- CTE)
The workshop brought experts from Sapienza, RomaTre, Tor
Vergata to discuss with start-up's at CTE
- 22 / 03 / 2023 Participation in the round table on “Intelligent technologies, risks
and rules”, organized by prof. L.V. Mancini for the Master's
Degree of Cybersecurity at Sapienza University, together prof.
G. Corasaniti, prof. C. Asaro, and prof. A. Panconesi
Rome, Italy
- 21 / 03 / 2022 Sequence Modelling and Forecasting with Deep Neural
Networks and Non-Deep Graph Neural Networks
At the Seminar on the Physics of Earthquake Faulting,
organized within the ERC advanced grant TECTONIC and ERC
Synergy Grant FEAR
Rome, Italy
- 7 / 12 / 2021 Sequence Modelling and Forecasting Human Motion
At the Embody Team Meeting,
Google Research Labs in Zurich, Switzerland

- 20 / 09 / 2021 Sequence Modelling and Forecasting with Deep Neural Networks
At the International Workshop on the Physics of Earthquake Faulting
Rome, Italy
- 25 / 11 / 2020 A Perspective on Perception and Intelligence
At Amazon, the Scout team
Tubingen, Germany
- 16 / 12 / 2019 Computer Vision and Machine Learning: Research Perspectives and Innovation Transfer
at the Helmholtz Center, Munich, Germany
- 5 / 11 / 2019 Computer Vision and Machine Learning, Applications and Research in Progress
at the Italian Ministry of Research and Education
Rome, Italy ([link](#))
- 13 / 09 / 2019 Query-guided End-to-End Person Search
at the Int. Conf. Image Analysis and Processing (ICIAP)
Trento, Italy ([link](#))
- 27 / 05 / 2019 Computer Vision for Perception, Representation and Learning
at Polytechnic University of Turin, Turin, Italy
- 9 / 9 / 2018 Computer Vision and Smart Lighting relevant to Assistive Technologies
at the Int. Workshop on Assistive Computer Vision and Robotics in conj. with European Conference of Computer Vision (ECCV)
Munich, Germany
- 11 / 09 / 2017 Computer Vision meets Smart Lighting
at the Int. Conf. Image Analysis and Processing (ICIAP)
Catania, Italy
- 30 / 08 / 2017 From Advanced Surveillance to Smart Lighting
at IEEE Int. Conf. on Advanced Video and Signal based Surveillance (AVSS), Lecce, Italy
- 25 / 05 / 2014 Graph-based video analysis and segmentation
Italian Institute of Technology (IIT), Genoa, Italy
- 10 / 12 / 2013 Video segmentation towards dynamic scene understanding
University of Technology Sydney (UTS), Australia
- 22 / 01 / 2013 Video Segmentation: algorithms, applications and benchmark
at the Fondazione Bruno Kessler (FBK), Trento, Italy
- 1 / 06 / 2011 Learning to Cluster Region Trajectories From Video Sequences
at the Max Planck Institute for Informatics
Saarbrücken, Germany

IV C – Advising of Senior Scientist

04/2023 – current Advisor of the non-tenured Assistant Professor (RTDA) Dr. Indro Spinelli at the Sapienza University of Rome

IV D – PhD student supervision

- 11/2023 – current Supervisor of the PhD student Leonardo Plini at the Sapienza University of Rome on “Machine Learning with Uncertainty for Physics”
Funded by the National Institute on Nuclear Physics ([INFN](#)) Laboratories in Frascati ([LNF](#))
- 11/2023 – current Supervisor of the PhD student Valentino Sacco at the Sapienza University of Rome on “Perception and planning for robot social navigation”
- 11/2023 – current Supervisor of the PhD student Matteo Gioia at the Sapienza University of Rome on “Self-supervised Representation Learning for Meshes and Point Clouds”
- 11/2022 – current Co-supervisor of the PhD student Simone Fiorellino at the Sapienza University of Rome on “Semantic Transmission for Edge-based Computer Vision and Topological Neural Networks”
In collaboration with prof. Paolo Di Lorenzo (DIET, Sapienza)
- 11/2022 – current Supervisor of the PhD student Daniele Trappolini at the Sapienza University of Rome on “Earthquake signal denoising, recognition and synthesis via diffusion and large language models”
Funded by the National Institute of Geophysics and Vulcanology ([INGV](#))
- 11/2022 – current Supervisor of the PhD student Edoardo De Matteis at the Sapienza University of Rome on “Advanced Machine Learning” researching multi-person body pose forecasting and motion synthesis”
Co-funded by [Leonardo Company S.p.A.](#)
- 11/2022 – current Supervisor of the PhD student Massimiliano Pappa at the Sapienza University of Rome on “Multi-modal text and body motion synthesis and alignment by human preference and AI algorithmic feedback”
- 11/2022 – current Co-supervisor of the PhD student Luca Collorone at the Sapienza University of Rome on “Diffusion-based Generative Models and Multi-modal Human Motion Synthesis”
Funded by DIAG, Sapienza
Main advisor: prof. Chiara Petrioli (DIAG, Sapienza)

- 11/2022 – current Supervisor of the PhD student Stefano D'Arrigo at the Sapienza University of Rome on "Anomaly detection by generative modelling and hyperbolic neural networks"
In collaboration with the [Panasonic R&D Labs](#), CA, USA
- 1/2022 – current Co-supervisor of the PhD student Giovanni Ficarra at the Sapienza University of Rome on "Underwater scene understanding and video transmission"
Funded by DIAG, Sapienza
Main advisor: prof. Chiara Petrioli (DIAG, Sapienza)
- 1/2022 – current Supervisor of the PhD student Paolo Mandica at the Sapienza University of Rome on "Hyperbolic deep learning for multi-modal recognition and learning"
In collaboration with the [Panasonic R&D Labs](#), CA, USA
"Green" scholarship, co-funding ex DM 1061/2021, PON funds
- 11/2021 – current Supervisor of the PhD student Luca Scofano at the Sapienza University of Rome on "Multi-body human pose forecasting and synthesis for robot motion planning"
Funded by [Leonardo Company S.p.A.](#)
- 11/2021 – current Supervisor of the PhD student Laura Laurenti at the Sapienza University of Rome on "Earthquake forecasting"
Funded by prof. [Chris Marone](#) (Geoscience dept. Sapienza)
- 11/2021 – current Supervisor of the PhD student Alessio Sampieri at the Sapienza University of Rome on "Human pose forecasting and synthesis for social robot navigation and interaction"
- 5/2021 – 5/2024 Supervisor of the PhD student Guido D'Amely at the Sapienza University of Rome on "Human-Robot Collaboration by Human Pose Forecasting"
Co-funded by [DSTech S.r.l.](#) and [Regione Lazio](#)
- 3/2021 – 5/2024 Supervisor of the PhD student Alessandro Flaborea at the Sapienza University of Rome on "Anomaly detection in actions and procedures"
Co-funded by [Data Wizard S.r.l.](#) and [Regione Lazio](#)
- 11/2020 – 1/2024 Supervisor of the PhD student Luca Franco at the Sapienza University of Rome on "Trajectory Forecasting with Graph Transformer Networks and Uncertainty Estimation"
Next: Manager at my Sapienza start-up [ItalAI S.r.l.](#)
- 11/2020 – 5/2024 Supervisor of the PhD student Muhammad Rameez Ur Rahman at the Sapienza University of Rome on "Meta-learning and Modelling Best Practices for Classification, Segmentation and Forecasting"
Next: Postdoc at the [University of Venice](#), Italy

- 10/2019 – 12/2023 Co-supervisor of the PhD student Cristiano Saltori at the University of Trento and OSRAM on “Domain adaptation and self-supervised learning for 3D object detection and segmentation”
Funded by European Institute of Innovation and Technology ([EIT](#)), OSRAM, and University of Trento
Next: [Nvidia](#), Italy
- 11/2017 – 02/2023 Co-supervisor of the PhD student Bharti Munjal at the Technical University of Munich (TUM) and OSRAM on “Person Search and Re-identification”
Next: [Airbus](#), Germany
- 11/2015 – 05/2019 Co-supervisor of the PhD student Irtiza Hasan at the University of Verona and OSRAM on “Head Pose Estimation and Trajectory Forecasting”
Next: Postdoc at [Inception Institute of Artificial Intelligence](#), UAE
- 11/2015 – 05/2019 Co-supervisor of the PhD student Theodoros Tsesmelis at the University of Verona, the Italian Institute of Technology (IIT) and OSRAM on “Measuring and Understanding Light in Real Life Scenarios”
Next: Postdoc at [IIT](#), Italy

IV E – Master’s student supervision

- 03/2024 – current Supervisor of the Master’s Student Ludovica Mazza at Sapienza University on “Social Navigation in Multi-agent environments”
- 03/2024 – current Supervisor of the Master’s Student Matteo Rampolla at Sapienza University on “Procedural Learning from Egocentric Cameras”
- 02/2024 – current Supervisor of the Master’s Student Aurora Bassani at Sapienza University on “Earthquake forecasting by Large Language Models”
- 01/2024 – current Supervisor of the Master’s Student Matteo Migliarini at Sapienza University on “Long-Range-Dependency Large Language Models”
- 02/2023 – 07/2023 Supervisor of the Master’s Student Arturo Ghinassi at Sapienza University on “Video super-resolution for Underwater Robotics”
- 02/2023 – 05/2024 Supervisor of the Master’s Student Alessio Palma at Sapienza University on “Generative human motion and video synthesis”
- 02/2023 – 10/2023 Supervisor of the Master’s Student Valentino Sacco at Sapienza University on “Semantic Segmentation with Uncertainty via Hyperbolic Neural Networks”
Next: PhD student at Sapienza

- 01/2023 – 10/2023 Supervisor of the Master's Student Cesare Giusti at Sapienza University on "Text Summarization". Thesis at Hyntelo S.r.l.
Next: PhD student at Sapienza
- 01/2023 – 10/2023 Supervisor of the Master's Student Leonardo Plini at Sapienza University on "Hyperbolic Self-Supervised Learning Skeleton-based Representation with an Hyperbolic Pretext Task"
Next: PhD student at Sapienza
- 01/2023 – 10/2023 Supervisor of the Master's Student Matteo Gioia at Sapienza University on "Self-Supervised Learning for 3D Mesh Representations"
Next: PhD student at Sapienza
- 09/2022 – 05/2023 Supervisor of the Master's Student Alessio Orlando at Sapienza University on "Parametric Human Body Shape Modelling". Thesis in collaboration with Scientists at Snapfeet - TRYA S.r.l.
- 06/2022 – 01/2023 Supervisor of the Master's Student Gabriella Trasciatti at Sapienza University on "Skeleton-based Activity Recognition"
Next: PhD student at Sapienza
- 05/2022 – 07/2023 Supervisor of the Master's Student Hassan Teymoori at Sapienza University on "Efficient visual recognition of foot attributes for augmented reality"
Thesis in collaboration with Scientists at Snapfeet - TRYA S.r.l.
Next: PhD student at Eindhoven University of Technology
- 05/2022 – 07/2023 Supervisor of the Master's Student Mahsa Barghi Mehmandari at Sapienza University on "Learning shoe comfort and customer satisfaction for fashion eCommerce"
Thesis in collaboration with Scientists at Snapfeet - TRYA S.r.l.
Next: PhD student at Eindhoven University of Technology
- 03/2022 – 07/2023 Supervisor of the Master's Student Moe Mowlai at Sapienza University on "Conditional Variational Auto-Encoders for People Trajectory Forecasting"
Next: PhD student at the University of Arizona
- 02/2022 – 10/2022 Supervisor of the Master's Student Luca Collorone at Sapienza University on "Neural Radiance Fields for Underwater Imagery"
Next: PhD student at Sapienza
- 02/2022 – 10/2022 Supervisor of the Master's Student Umberto Valleriani at Sapienza University on "Image super-resolution of underwater imagery"
Next: Wsense S.r.l.
- 01/2022 – 10/2022 Supervisor of the Master's Student Edoardo De Matteis at Sapienza University on "Best Practices for 2-Body Human Pose Forecasting"
Next: PhD student at Sapienza

- 12/2021 – 10/2022 Supervisor of the Master's Student Stefano D'Arrigo at Sapienza University on "Detecting Anomalies in Human Behavior by Encoding Kinematic Graphs in a Constrained Hyperspherical Space"
Next: PhD student at Sapienza
- 04/2021 – 10/2021 Supervisor of the Master's Student Paolo Mandica at Sapienza University on "Contrastive learning for unlabeled video representation learning"
Next: PhD student at Sapienza
- 04/2021 – 10/2021 Supervisor of the Master's Student Luca Scofano at Sapienza University on "People trajectory forecasting in Basketball with Graph Convolutional Networks"
Next: PhD student at Sapienza
- 02/2021 – 10/2021 Supervisor of the Master's Student Marco Gregnanin at Sapienza University on "Sequence Modelling and Forecasting for Economics"
Next: Altran
- 02/2021 – 05/2021 Supervisor of the Master's Student Alessio Sampieri at Sapienza University on "Human pose forecasting with Spatio-Temporal Graph Neural Networks"
Next: PhD student at Sapienza
- 06/2020 – 10/2021 Supervisor of the Master's Student Romeo Lanzino at Sapienza University on "Few-Shot Object Detection"
Next: PhD student at Sapienza
- 10/2020 – 10/2021 Supervisor of the Master's Student Giovanni Ficarra at Sapienza University on "Detection and learning of underwater invariance"
Next: PhD student at Sapienza
- 10/2020 – 10/2021 Supervisor of the Master's Student Leonardo Placidi at Sapienza University on "Video Compression with Transformer Networks"
Next: PhD student at Osaka University
- 09/2020 – 10/2021 Supervisor of the Master's Student Laura Laurenti at Sapienza University on "Forecasting Earthquakes"
Next: PhD student at Sapienza
- 6 / 2020 – 3/2021 Supervisor of the Master's Student Katsiaryna Zavadskaya at Sapienza University on "Efficient underwater video transmission"
Next: Textkernel, Amsterdam, Netherlands
- 3 / 2020 – 10/2020 Supervisor of the Master's Student Luca Franco at Sapienza University on "People Trajectory Forecasting with Graph CNNs and Transformer Networks"
Next: PhD student at Sapienza

- 3 / 2020 – 10/2020 Supervisor of the Master's Student Alessandro Flaborea at Sapienza University on "Re-identification and Fine-grained Classification"
Next: PhD student at Sapienza
- 3 / 2020 – 01/2021 Supervisor of the Master's Student Theodoros Sofianos at Sapienza University on "Human Pose Forecasting with Spatio-temporal Graph CNNs"
Next: PharmaLex, Barcelona, Spain
- 3 / 2020 – 10/2020 Supervisor of the Master's Student Michele Cernigliaro at Sapienza University on "People Forecasting with Spiking Neural Networks"
Next: Amazon AWS, Luxemburg
- 2 / 2020 – 10/2020 Co-supervisor of the Master's Student Debora Caldarola at Polytechnic University of Turin on "Towards Real World Federated Learning"
Next: PhD student at Turin Polytechnic
- 11/2018 – 7 / 2019 Co-supervisor of the Master's Student Ahmed Talbi at the Technical University of Munich and OSRAM on "Real-time Object Detection for Embedded Platform with Model Compression and Knowledge distillation"
- 9 / 2018 – 2 / 2019 Co-supervisor of the Master's Student Ehsan Amiri at the University of Freiburg and OSRAM on "Class-agnostic Global Box Regression"
- 3 / 2018 – 9 / 2018 Co-supervisor of the Master's Student Azade Farshad at the Technical University of Munich and OSRAM on "Deep Neural Network Compression"
Next: PhD student at the Technical University of Munich
- 1 / 2018 – 7 / 2018 Co-supervisor of the Master's Student Rafey Abdul Aftab at the Technical University of Munich and OSRAM on "Joint Detection and Tracking for Multiple Objects Using Feature Learning"
- 9 / 2014 – 3 / 2015 Co-supervisor of the Master's Student Zornitsa Kostadinova at the Max Planck Institute for Informatics on "Efficient Image Segmentation with Structured Random Forests"
- 1 / 2014 – 6 / 2014 Co-supervisor of the Master's Student Anna Khoreva at the Max Planck Institute for Informatics on "Video Segmentation and Graph Learning with Spectral Techniques"
Next: PhD student at the Max Planck Institute for Informatics
- 9 / 2013 – 12/2013 Co-supervisor of the Master's Student Rahim Kadkhoda Mohammadi at the Max Planck Institute for Informatics on "Joint Pose Estimation and Segmentation"
Next: PhD student at Strasbourg University

IV F – Academic appointments

Since 4 / 2020	Member of the Data Science PhD Committee at Sapienza Univ.
Since 12 / 2022	Member of strategic commission for Machine Learning courses and activities, at the M.Sc. in Data Science
Since 02/2020	Collaborator in the organization of the Industry Liaison Program event, at the M.Sc. in Data Science
01 / 2024	Member of external Ph.D. commission for Matteo Tortora, Biomedical Campus University Rome, on “Exploring the Potential of Multimodal (Deep) Learning”
1 / 2024	Member of internal Ph.D. commission for Federico Siciliano, Sapienza University, on “Architectural Components of Trustworthy Artificial Intelligence”
1 / 2024	Member of internal Ph.D. commission for Lorenzo Giusti, Sapienza University, on “Topological Neural Networks”
1 / 2024	Member of internal Ph.D. commission for Luca Maiano, Sapienza University, on “Media forensics investigations: from the origin to the authenticity of digital content”
10 / 2023	Member of external Ph.D. commission for Silvia Bucci, Turin Polytechnic, on “Visual Domain Generalization via Self-Supervised Learning”
4 / 2023	Member of internal Ph.D. commission for Valerio Marsocci, Sapienza University, on “Tackling the main challenges for an effective application of deep learning to earth observation”

IV G – Attribution of teaching and research fellowship at foreign institutions

- Teaching assistant at the Image Processing course at the University of Cambridge. The commitment has regarded the preparation of hands-on practice classes, the review of the programming assignment, the guidance of project work, the correction of the final reports and the student exams on the laboratory topics. From 09/2006 to 03/2008
- Guest lecturer at the course “Computer Vision” at the University of Cambridge. Lecturing has regarded the topic of segmentation and human motion recognition in computer vision. The lectured algorithms have ranged from early techniques to state-of-the-art, including own research. From 09/2009 to 03/2011
- Teaching assistant of the course “High Level Computer Vision” at the University of Saarland. The commitment has regarded the preparation of hands-on practice classes, the review of the programming assignment, the guidance of project work and the correction of the final reports. From 01/2011 to 08/2014
- Guest lecturer at the course “High Level Computer Vision” at the University of Saarland. Lecturing has regarded the topic of segmentation in the computer vision field, ranging from early methods to the state-of-the-art, including own research. From 03/2011 to 08/2014

Part V - Society memberships, Awards and Honors

V A – Awards and Honors

12 / 2023	Italian Habilitation (ASN) as Full Professor (Fascia I) in Computer Science (01/B1 - INF/01)
02 / 2023	Winner of the Call for International Mobility Sapienza 2022 for partially funding the stay of two PhD students from my lab at the University of Berkeley (host: prof. Trevore Darrel, Berkeley Artificial Intelligence Research Lab -- BAIR)
09 / 2022	CVPL Alfredo Petrosino award for the best Master's thesis work, awarded to my supervised student Alessio Sampieri, for the research on Human Pose Forecasting with Space-Time-Separable Graph Convolutional Network
07 / 2020	Italian Habilitation (ASN) as Associate Professor in Computer Science (01/B1) and Information Engineering (09/H1)
2019	1 st place IoT/WT Innovation World Cup – Top IoT Innovator “City”
2019	1 st place Digital Champions Award – South Germany
2018	3 rd place in the DETRAC car tracking competition at AVSS'18
2018	2 nd place German Digital Award for Innovation
2017	1 st place in the DETRAC car detection competition at AVSS'17
2014	Outstanding Reviewer at CVPR (Awarded to 50 out of 1000)
2014	Outstanding Reviewer at ECCV (Awarded to 50 out of 1000)
2005	“A Luisa Aldobrandini” PhD scholarship Awarded yearly by St. John's College for the duration of the PhD studies
1999 – 2003	Best student in electrical engineering at RomaTre University Awarded yearly to 5 out of 100 students
1997	17 th place in Italian national mathematical games 2000 students took part in the finals from all Italian high schools

V B – Society memberships

Since 3 / 2020	Member of European Lab for Learning and Intelligent Systems (ELLIS)
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Part VI – Participation and/or Organization of International Conferences and Workshops

VI A – International Conference Chairing

- 2025 General Chair of the 23rd International Conference on Image Analysis and Processing ([ICIAP'25](#)) to take place in Sapienza. ICIAP is the main venue of the [CVPL](#) (Italian Association for Computer Vision, Pattern Recognition and Machine Learning), endorsed by the International Association for Pattern Recognition ([IAPR](#))
- 2024 Area Chair at NeurIPS International Conference ([NeurIPS](#))
- 2024 Lead Area Chair at ECCV International Conference ([ECCV](#))
- 2024 Associate Chair at VISAPP International Conference ([VISAPP](#))
- 2023 Area Chair at BMVC International Conference ([BMVC](#))
- 2023 Area Chair at CVPR International Conference ([CVPR](#))
- 2023 Associate Chair at VISAPP International Conference ([VISAPP](#))
- 2022 Area Chair at BMVC International Conference ([BMVC](#))
- 2022 Area Chair at ECCV International Conference ([ECCV](#))
- 2022 Associate Editor for ICPR International Conference ([ICPR](#))
- 2022 Associate Chair and Session Chair at VISAPP International Conference ([VISAPP](#))
- 2021 Area Chair at BMVC International Conference ([BMVC](#))
- 2021 Area Chair and Session Chair at VISAPP International Conference ([VISAPP](#))
- 2021 Industrial Chair at ICIAP International Conference ([ICIAP](#))
- 2020 Area Chair at BMVC International Conference ([BMVC](#))
- 2020 Industrial Chair and Exhibit Chair at ICPR International Conference ([ICPR](#))
- 2020 Area Chair and Session Chair at VISAPP International Conference ([VISAPP](#))
- 2019 Industrial Chair at ICIAP International Conference ([ICIAP](#))
- 2019 Area Chair at VISAPP International Conference ([VISAPP](#))
- 2017 Area Chair at ICCV International Conference ([ICCV](#))

- 2017 Area Chair at AVSS International Conference ([AVSS](#))
- 2017 Area Chair at VISAPP International Conference ([VISAPP](#))
- 2015 Area Chair at VISAPP International Conference ([VISAPP](#))

VI B –Workshop organization and participation in school committee

- Since 2013 Member of committee at Int. Computer Vision Summer School ([ICVSS](#))
ICVSS was awarded the *IEEE PAMI Mark Everingham Prize* in 2017 by the *Technical Committee on Pattern Analysis and Machine Intelligence* of the *IEEE Computer Society*
- 09 / 2024 Co-organizer of the international workshop “Beyond Euclidean: hyperbolic and hyperspherical learning for computer vision (<https://sites.google.com/view/beyondeuclidean>); in conj. with the European Conference on Computer Vision (ECCV’24)
- 09 / 2023 Lecturer at the International Summer School on Machine Vision ([VISMAL’23](#))
Organized by the Italian Association for Computer Vision, Pattern Recognition and Machine Learning ([CVPL](#))
- 01 / 2021 Co-organizer of the International Workshop on Pattern Forecasting ([PATCAST](#)); in conj. with the International Conference on Pattern Recognition ([ICPR’20](#))
- 2018 Co-organizer of the International Workshop on Video Segmentation (IWVS’18); in conj. with the European Conference on Computer Vision (ECCV’18)
- 2016 Co-organizer of the International Workshop on Video Segmentation (IWVS’16); in conj. with the European Conference on Computer Vision (ECCV’16)
- 2014 Co-organizer of the International Workshop on Video Segmentation ([IWVS’14](#)); in conj. with the European Conference on Computer Vision (ECCV’14)

VI C – Participations in program committee and reviewing

2023	Reviewer for the journal Frontiers in Computer Science
2023	Program committee member of International Conference on Computer Vision (ICCV)
2023	Reviewer for the Journal of Geophysical Research Solid Earth
2022	Reviewer for Pattern Recognition (PR)
2022	Member of the organizing committee for the Ital-IA workshop on AI for Industry
2022	Program committee member of IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)
2020	Member of Program Committee and Session Chair (Industry) AIIS Italian National Lab: Italian Stories at Maker Faire 2020
2015	Reviewer for Neurocomputing (NEUCOM)
2014	Reviewer for IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
2014	Program committee member of IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)
2014	Program committee member of European Conference on Computer Vision (ECCV)
2013	Program committee member of International Conference on Computer Vision (ICCV)
2013	Reviewer for IEEE Transactions On Circuits And Systems For Video Technology 2013
2011	Reviewer for Pattern Recognition (PR)

VI D – Participation as presenter in International Conferences

- Participation as presenter at the 18th British Machine Vision Conference (BMVC 2007), Warwick, United Kingdom. From 10-09-2007 to 13-09-2007
- Participation as presenter at International Symposium on Visual Computing (ISVC 2007), Lake Tahoe NV, United States from 26-11-2007 to 28-11-2007
- Participation as presenter at International Symposium on Visual Computing (ISVC 2008), Las Vegas NV, United States from 01-12-2008 to 03-12-2008
- Participation as presenter at IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2009), Miami FL, United States from 20-06-2009 to 25-06-2009
- Participation as presenter at IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2010), San Francisco CA, United States from 13-06-2010 to 18-06-2010
- Participation as presenter at IEEE International Conference on Computer Vision (ICCV 2011), Barcelona, Spain from 06-11-2011 to 13-11-2011
- Participation as presenter at 11th Asian Conference on Computer Vision (ACCV 2012), Daejeon, South Korea from 05-11-2012 to 09-11-2012
- Participation as presenter at 14th IEEE International Conference on Computer Vision (ICCV 2013), Sydney NSW, Australia from 01-12-2013 to 08-12-2013
- Participation as presenter at 27th IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2014), Columbus, United States from 23-06-2014 to 28-06-2014
- Participation as presenter at IEEE Conference on Computer Vision and Pattern Recognition, (CVPR 2015), Boston, United States from 07-06-2015 to 12-06-2015
- Participation as presenter at Smart Lighting from 24-05-2016 to 26-05-2016
- Participation as presenter at 14th European Conference on Computer Vision (ECCV 2016), International Workshop on Video Segmentation, Amsterdam, Netherlands from 08-10-2016 to 16-10-2016
- Participation as presenter at 19th International Conference on Image Analysis and Processing (ICIAP 2017), Workshop on Social Signal Processing and Beyond, Catania, Italy from 05-06-2017 to 05-06-2017
- Participation as presenter at 14th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS 2017), Lecce, Italy from 29-08-2017 to 01-09-2017
- Participation as presenter at IEEE/CVF International Conference on Computer Vision (ICCV 2017), Workshop on Color and Photometry in Computer Vision, Venice, Italy from 29-10-2017 to 29-10-2017
- Participation as presenter at 15th European Conference on Computer Vision (ECCV 2018), Workshop on Compact and Efficient Feature Representation and Learning in Computer Vision (CEFRL 2018), Munich, Germany from 09-09-2018 to 09-09-2018
- Participation as presenter at IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2019), Long Beach, United States from 16-06-2019 to 20-06-2019
- Participation as presenter at British Machine Vision Conference (BMVC 2020), Birmingham, United Kingdom from 7-09-2020 to 10-09-2020
- Participation as presenter at International Conference on Pattern Recognition (ICPR 2020), Milan, Italy from 10-01-2021 to 15-01-2021
- Participation as presenter at IEEE/CVF International Conference on Computer Vision (ICCV 2021), Virtual Conference, from 11-10-2021 to 17-10-2021
- Participation as presenter at the European Conference on Computer Vision (ECCV) 2022, Tel Aviv, Israel, from 23-10-2022 to 27-10-2022
- Participation as presenter at International Conference on Learning Representations (ICLR) 2023, Rwanda, Africa, from 01-05-2023 to 05-05-2023
- Participation as presenter at IEEE/CVF Conf. on Computer Vision and Pattern Recognition (CVPR) 2023, Vancouver, British Columbia, Canada, from 18-06-2023 to 22-06-2023
- Participation as presenter at IEEE/CVF International Conference on Computer Vision (ICCV) 2023, Seattle, WA, USA, from 2-10-2023 to 6-10-2023
- Participation as presenter at IEEE/CVF Conf. on Computer Vision and Pattern Recognition (CVPR) 2024, Seattle, WA, USA, from 17-06-2024 to 21-06-2024

Part VII - Funding Information [grants as PI-principal investigator or I-investigator]

- 11/2024 – 10/2027 **Principal Investigator** for the “Safe-AI” PhD scholarship, ex DM 630/2024, co-funded by my Sapienza Start-up [ItalAI s.r.l.](#) and by the NextGenerationEU, D.M. 630/2024, PNRR, mission 4, component 2, investment 3.3
Industrial funding: 10.0k EUR; PNRR funding: 60k EUR
- 11/2024 – 10/2027 **Principal Investigator** for the scholarship granted by the Geoscience Department, Sapienza, for the project “The use of Large Language Models (LLM) in Geophysics”
Funding: 79.8k EUR
- 4/2024 – 3/2025 **Principal Investigator** for the research project “machine learning research on hyperbolic space embeddings” by [Panasonic](#)
Funding: 60k USD
- 4/2023 – 11/2025 **Participant** in the research project “Normative and Digital Solutions to Counter Threats during National Election Campaigns (RightNets)”, P2022MCYCK, awarded by the Ministry of Research and University (MUR), Progetti di Ricerca di Rilevante Interesse Nazionale (PRIN’22 DD n. 1409 del 14/09/2022), within the Sapienza Unit (coordinator Avv. Prof. Francesco Bilancia, Sapienza).
Total funding 242.3k EUR; Sapienza funding: 60k EUR; personal participation funding: 15k EUR
- 12/2023 – 12/2025 **Participant** in the research project “A Cost-adaptive Neural Network framework for Semantic communication (CENTS)”, awarded by Sapienza University.
Total funding 42.5k EUR plus a research associate position for 1 year; personal participation funding: 8.5k EUR
- 09/2023 – 12/2023 **Principal Investigator** for the research project on underwater video compression, funded by [WSENSE s.r.l.](#)
Funding: 37k EUR
- 4/2023 – 3/2024 **Principal Investigator** for the research project “machine learning research on video forecasting for contrastive unsupervised learning” by [Panasonic](#)
Funding 60k USD
- 01/2023 – 12/2025 **Principal Co-Investigator** for the project "Foundations of High-quality AI" PE-1 within the spoke 5 of "Future Artificial Intelligence Research" (FAIR), funded by the "Piano Nazionale di Ripresa e Resilienza" (PNRR). Leader of the work-package 5.6 on "Engineering and Scientific Qualities in Machine Learning". Fund manager for the Computer Science Department funding of ~650 kEUR

- 12/2022 – 12/2024 **Principal Investigator** for the research project “Predictive Perception for Collaborative Robots (PrePeR)”, awarded by Sapienza University
Funding 15k EUR
- 11/2022 – 10/2025 **Principal Investigator** for the project “Advanced Machine Learning”, co-funded by [Leonardo Company S.p.A.](#) and by the PNRR mission 4, component 2, investment 3.3, ex DM 352/22
Industrial funding 45.0k EUR; PNRR funding 33k EUR
- 11/2022 – 10/2025 **Principal Investigator** for the project “Earthquake signal denoising, recognition and synthesis via diffusion and large language models”, funded by the National Institute of Geophysics and Vulcanology ([INGV](#))
Funding 78.1k EUR
- 10/2022 – 12/2022 **Principal Investigator** for the research project on parametric foot shape recognition, funded by [SnapFeet](#) TRYA S.r.l.
Funding 3k EUR
- 05/2022 – 05/2023 **Principal Investigator** for a computational resource grant on the [Marconi100 HPC](#) (100,000 core hours on DGX) for research on Hierarchies and Objects in Self-supervised video representation learning (HOBS)
- 4/2022 – 3/2023 **Principal Investigator** for the research project “Self-Supervised Skeleton-based Representation Learning” by [Panasonic](#)
Funding 40k USD
- 3/2022 – 2/2025 **Principal Investigator** for the research project “Forecasting Multi-Agent Trajectories (FORMAT)”, awarded by Sapienza University
Funding 36.8k EUR (incl. a research associate position for 1y)
- 1/2022 – 10/2024 **Principal Investigator** for the funding of the PhD position, project “EVER: towards grEen and sustainable large-scale self-supervised Video rEpresentation LeaRning” co-funded by [Panasonic](#) and by the FSE RECT-EU DM 1061/2021
Industrial funding: 10k; FES REACT-EU funding: 60k EUR
- 11/2021 – 10/2024 **Principal Investigator** for the project “Multi-body human pose forecasting and synthesis for robot motion planning”
Funded by [Leonardo Company S.p.A.](#)
Funding 76.8k EUR
- 11/2021 – 10/2024 **Principal Investigator** for the scholarship granted by the Geoscience Department, Sapienza, for the project “Earthquake forecasting”
Funding: 78.1k EUR

- 5/2021 – 4/2024 **Principal Investigator** for the research project “FashionAI” on multi-modal image and text-based image-retrieval based and recommendation system, co-funded by DSTech S.r.l. and Regione Lazio
Funding: 65.5k EUR
- 4/2021 – 3/2022 **Principal Investigator** for the research project “Video Forecasting for Contrastive Unsupervised Learning” by [Panasonic](#)
Funding 40k USD
- 3/2021 – 2/2024 **Co-Investigator** for the research project “Sensor-based Health Analytics”, co-funded by Datawizard S.r.l. and Regione Lazio
Funding: 65.5k EUR
- 1/2021 – 12/2023 **Principal Investigator** for the research project “Multi-agent Forecasting of Game Play (FOREGAME)”, awarded by Sapienza University
Funding 37.8k EUR (incl. a research associate position for 1y)
- 10/2020 – 09/2021 **Principal Investigator** for the research project “DeepCompression” on underwater video compression, funded by [WSENSE s.r.l.](#)
Funding: 8k EUR
- 10/2020 – 07/2021 **Recipient** for a computational resource grant on the [Marconi100 HPC](#) (4000 hours on V100 Nvidia GPUs) for research on Point Cloud Domain Adaption via Forecasting (Principal Investigator: Prof. E. Ricci)
- 09/2020 – 06/2021 **Principal Investigator** for a computational resource grant on the [Marconi100 HPC](#) (4000 hours on V100 Nvidia GPUs) for research on Domain Adaptation for Neural Architecture Search
- 09/2020 – 09/2021 **Recipient of [Google Cloud Research Grant](#)** in support of research on "Object Search and Re-Identification in Dynamic Environments"
- 07/2020 – 09/2020 **Recipient of [Google Cloud Platform Education Grant](#)** in support of a 3-day Google-Sapienza workshop seminar on work on "Building an image search engine"
- 10/2019 – 10/2024 **Principal Co-Investigator** of the PhD Grant by the European Institute of Innovation and Technology ([EIT](#)) (Duration 3 years)
Funding: 25k EUR
- 12/2016 – 11/2019 **Principal Co-Investigator** of the German-funded (BMW) project named MECview (Duration 3 years, acceptance rate 10%)

- 1 / 2016 – 12/2018 **Principal Co-Investigator** of the German-funded (BMBF) project named [I2EASE](#)
(Duration 3 years, acceptance rate 10%)
- 10/2015 – 12/2016 **Principal Co-Investigator** of the German-funded (BMBF) project named [LiONS](#)
(acceptance rate 10%)
- 10/2014 – 9/2017 **Principal Co-Investigator** of the German-funded (BMBF) project named [InnoSYS](#)
(Duration 3 years, acceptance rate 10%)
- 10/2015 – 9/2019 **Principal Investigator and Coordinator** of the EU Marie Skłodowska-Curie ITN-EID project named SceneUnderLight
Best score among all submissions in 2015, selected for press coverage (Duration 4 years, acceptance rate 2.5%)
Funding: 507k EUR

Part VIII – Leadership and Participation in Research with National and International Collaborations

VIII A – Leadership

- Management of the Computer Vision Department at OSRAM GmbH. The department is responsible for R&D on computer vision and machine learning and for the transfer of innovation in the field of smart lighting (office, retail, city, industry). Specific research topics include detection, recognition, tracking, re-identification, forecasting, 3D reconstruction, domain adaptation, lighting estimation, photometry.
Team size: 12 staff members + 8 working students.
From 09-2014 to 07/2019
- Head of the Perception and Intelligence Lab (PINlab) at the Department of Computer Science, University of Rome La Sapienza. PINlab conducts fundamental research and innovation transfer in computer vision and machine learning. Specific research topics include distributed and multi-agent intelligent systems, perception (detection, recognition, re-identification, forecasting) and general intelligence (reasoning, meta-learning, domain adaptation), in sustainable (low-power-consumption and constrained-computational resource sensors and devices) and interpretable (interpretable and verifiable AI) frameworks. PINlab has collaborated and collaborates nationally and internationally with several universities, academic institutions and companies. The result of the research has been published (or accepted for publication) in top journals, including TPAMI, PR, AIM and ACM-Surveys, and in several top conferences, including CVPR, ICCV, ECCV, ICLR, ICML.
Group web page: <https://www.pinlab.org/>
Team size: 1 non-tenured assistant professor (RTDA), 14 PhD students, 6 Master's students.
Alumni: 5 PhD alumni, 29 Master's alumni
From 09/2019 to today
- Co-founder and Co-director of the Sapienza Start-up ItalAI S.r.l.. ItalAI targets the technological transfer of research from the PINlab academic group into products.
Web page: <https://italailabs.com/>
Team size: 2 tenured employees, 1 non-tenured employees, 1 PhD incoming position, 1 intern
From 01-2024 to today

VIII B – Participation in National and International Research

(PI roles are marked in the case of last-authorships in publications)

- Participation in the national level research collaboration with University of Freiburg (Germany), on the topic of video segmentation, with results published at the international conferences ICCV'13, CVPR'14 from 06/2012 to 06/2014
- Participation in the national level research collaboration with University of Saarland (Germany), on the topic of video segmentation, with results published at the national conferences GCPR'14 and international conferences CVPR'15, ECCV'16 from 01/2014 to 10/2016
- Participation in international research collaboration with Fraunhofer IOF Jena, Infineon Technologies AG, OSRAM OS, RZB GmbH, TU Darmstadt, on topics of smart lighting and presence detection. Part of the work was published at the international conference VISAPP'17 from 10/2014 to 09/2017
- Participation in the national research collaboration with Fraunhofer IPT, Goetting KG, Lufthansa Technik Logistik GmbH, on the topics of simultaneous localization and mapping (SLAM) and light-based positioning from 10/2015 to 09/2016
- Coordination and participation in the international research collaboration with the Italian Institute of Technology (IIT) and the University of Verona, on the topic of detection, recognition, pose estimation, forecasting, lighting estimation and photometry, including applications to smart lighting, with results published at the international conferences ICIAP'17, ICIP'17, ICCV'17, CVPR'18, WACV'18, WACV'19 (2 papers), TPAMI'19 from 10/2015 to 10/2019

Role: **Coordinator and PI**

- Participation in international research collaboration with RWTH Aachen University, ICE Gateway BmbH, Ebee Smart Technologies GmbH, Mat.traffic GmbH, on topics of smart cities and car detection and tracking. Part of the work was published at the international conferences AVSS'17 and AVSS'18. From 01/2016 to 31/2018
- Participation in international research collaboration with University of Ulm, Bosch, Daimler, IT Designers Gruppe, Nokia, TomTom, University of Duisburg, on topics of smart cities, model compression, car detection and tracking. Part of the work was published at the international conference ECCV'18. From 12/2016 to 11/2019
- Participation in the international research collaboration with OSRAM (Germany) and Technical University of Munich (Germany), on the topic of re-identification and meta-learning, with results published at the international conferences BMVC'19, CVPR'19, and on PR'22 magazine. From 11/2017 to 10/2022

Role: **PI**

- Participation in international research collaboration with OSRAM (Germany) and University of Trento (Italy), on topics of domain adaptation, video analysis and 3D detection. Research partially funded by the European Institute of Innovation and Technology (EIT). Output publications have included 2 papers in ECCV'22, then papers in 3DV'20 and TPAMI'23. From 10/2019 to 10/2022

Role varied including **PI**

- Participation in the international research collaboration with Huawei (London, UK) and with the Polytechnic of Turin on the topics of Adversarial Branch Architecture Search for Unsupervised Domain Adaptation and Federated Learning. The research was published on the WACV'22 international conference and at a CVPR'21 workshop. From 03/2021 to 01/2022
- Participation in the national research collaboration with the University of Verona, on topics of Human Pose Forecasting for Predictive Perception in Human-robot Collaboration. The research has been published in top conferences such as ECCV'22 and on top journals such as PR'23. It currently focusses on human-robot collaboration topics. From 01/2022 to today

Role: **PI**

- Participation in the national level research collaboration with the National Institute of Geophysics and Volcanology (INGV) on topics of Prediction of source data for earthquakes, generation of synthetic earthquake traces and removal of noise from earthquake traces. The collaboration has resulted in a publication in the journal JGR'24 and several conference presentations at EGU'24, --'23. From 08/2022 to today
- Participation in the international research collaboration with the Berkeley Artificial Intelligence Research Lab (BAIR, <https://bair.berkeley.edu/>) at University of California at Berkeley UC Berkeley (CA, USA), contact prof. Trevor Darrel, with the Panasonic Corporation R&D Lab (CA, USA). The collaboration includes the supervision of three Sapienza doctoral students visiting UC Berkeley, two of whom visited UC Berkeley, and two Master's students in my research group. Output of the collaboration includes publication in ICLR'23 and ICML'24 from 02/01/2023 to today
Role: **PI**
- Participation in the national level research collaboration with the National Institute on Nuclear Physics (INFN). The collaboration involves one PhD student from my research group, visiting the Laboratories in Frascati. From 11/2023 to today
- Participation in the international collaboration with the University of Amsterdam (Netherlands), prof. Pascal Mettes. The collaboration includes 2 PhD students from Sapienza, 1 postdoc from the University of Amsterdam, one Master's level student from the University of Amsterdam with a travelling grant by ELLIS. The collaboration output includes an accepted conference paper at IROS'23 and one under submission at NeurIPS'24
Role varied including **PI**
- Participation in the national collaboration with the Department of Law in Sapienza prof. Francesco Bilancia and the University of Macerata profs. Emanuele Frontoni and Marina Paolanti, on supporting fair decisions and electoral campaigns by Machine Learning and Computer Vision. From 11/2023 to today
- Participation in the international collaboration with the Paris Telecom research institute (France), prof. Stéphane Lathuilière. The collaboration has involved a PhD student visiting the Paris labs. The current collaboration output is under submission at the ICPR'24 conference. From 04/2023 to today
Role: **PI**
- Participation in the international collaboration with the University of Darmstadt, prof. Georgia Chalvatzaki, on research objectives of robot path planning and human-robot-collaboration. The collaboration involves a PhD student from Sapienza now visiting the University of Darmstadt, and prof. Indro Spinelli from my research group. From 05/2024 to today
- Participation in the international collaboration with University of Michigan, (MI, USA) prof. Stella Yu, University of Aberdeen (United Kingdom) Dr. Aiden Durant and prof. Georgio Leontidis, University of Oslo (Norway) Dr. Adin Ramirez Rivera, Arctic University of Norway (Norway) Dr. Michael Kampffmeyer, University of Amsterdam (Netherlands), prof. Pascal Mettes, Dr. Leyla Mirvakhabova Qualcomm AI Research, and prof. Spinelli from my research group, on Hyperbolic and Hyperbolic and hyperspherical (deep) learning for computer vision. An output of the collaboration is the first workshop on the topic, which has very recently attracted rapidly increasing research. The team has set to organize a workshop at ECCV'24 <https://sites.google.com/view/beyondeuclidean/> from which multiple research objectives will derive. From 01-2024 to today.
- Participation in the international collaboration with Nvidia prof. Laura Leal Taixe, the Technical University of Munich Ms. Elisabeth Schiele and 3 PhD students from my research group. The output of the collaboration has resulted in a BMVC'23 paper, selected for oral presentation. The team currently works on a journal extension. 11/2022 to today.
Role: **PI**
- Participation in the national collaboration with the University of Catania, profs. Giovanni Maria Farinella and Antonino Furnari, with 2 PhD students and 1 master's student from my research group. The research output has been presented at CVPR'23. From 6/2023 to today.
Role: **Co-PI**

- Participation in the national collaboration with Department of Information engineering, electronics and telecommunication (DIET), profs. Simone Scardapane and Paolo Di Lorenzo, and the Department of Computer Science (DI) prof. Alessandro Checco, on semantic transmission by means of machine learning and computer vision models that include sequence modeling and scene understanding. From 11/2023 to today.
 - Participation in the international collaboration with the Los Alamos National Laboratories (NM, USA) Dr. Christopher W Johnson, Pennsylvania State University (PA, USA) and Sapienza University, dept. of Geoscience, profs. Chris Marone and Elisa Tinti, on forecasting earthquakes. From 10/2023 to today
 - Participation in the national collaboration with the University of Padua prof. Lamberto Ballan, the Bruno Kessler Foundation (FBK) Dr. Tommaso Campari on motion forecasting and modelling for robot navigation. From 11/2023 to today
- Role: **PI**

Part IX – Research Activities

Hyperbolic Deep Learning and the model self-assessment of uncertainty

In the context of deep learning, Euclidean geometry is the default basis for deep neural networks, under the naïve assumption that this topology is optimal for all types of data and tasks. However, a growing number of research works argue that certain data and representations are better described by hyperbolic geometries. Among the target cases are hierarchical concepts, such as top-down approaches to the part-object-scene, multimodal hierarchical models for images and text, and few-shot learning.

Our group has pioneered the use of hyperbolic deep learning in the estimation of uncertainty and demonstrated the correlation between the radius of hyperbolic representations of images, videos or pixels and the epistemic uncertainty, i.e. the model lack of knowledge due to being exposed to an insufficient number of representative samples. The novel finding has led to models self-assessing their action recognition capabilities [**Franco et al. ICLR'23**], distinguishing between uncertain and anomalous samples [**Flaborea et al. CVPR'23 VAND workshop**], identifying anomalies in the behavior of the elderly [**Prekaj et al. AIM'23**], and selecting novel data for active learning by the use of the hyperbolic radius [**Franco et al. ICML'24**].

Research perspectives include a broad discussion to stock progress in the field at a novel international workshop, which we organize in conjunction with ECCV'24:

<https://sites.google.com/view/beyondeuclidean/home>

Novel research directions include combining hyperbolic geometry with path planning in the social navigation of robots among people, i.e. letting the robot self-assess when the motion of people is most unpredictable and caution must be taken to prevent harm [**D'Amely et al. accepted at IROS'24**].

More broadly, we target the self-estimation of uncertainty for each language or multi-modal generative model, e.g. endowing the next version of ChatGPT to abstain from answering a question which it is certain about.

This research includes a collaboration with the University of Amsterdam, the University of California Berkeley, USA, the University of Michigan, USA, the University of Aberdeen, the University of Oslo, the Arctiv University of Norway, and the Panasonic R&D center in CA, USA, and Qualcomm AI Research.

Long-term Forecasting of Human Motion and Activities

Forecasting the future motion of people allows machines to collaborate with them (robotic arms of cobots in smart manufacturing) and to navigate among them (dog robots delivering items, autonomous cars navigating across populated cities).

Our group has been the first to have predicted human trajectories with a Transformer network [**Franco et al. ICPR'20, Franco et al. PR'23**], additionally taking into consideration the visual attention of people [**Hasan et al.**].

CVPR'18, Hasan et al. TPAMI'21]. We have also pioneered novel efficient Graph Convolutional Network models [**Sampieri et al. ICCV'21**] that have proven applicability in novel human-robot collaborative tasks [**Sampieri et al. ECCV'22**].

Additionally, research from our team has addressed the novel goals of multi-people human pose forecasting [**Rahman et al. CVPR'23 Precognition workshop, Scofano et al. NP Letters'24**] and scene-aware global human motion forecasting [**Scofano et al. BMVC'23**].

Novel directions of investigation include long-term human motion predictions, addressing the complexity of Transformer models by State-Space Models such as Mamba; gathering heterogeneous web-scale data to develop foundation models of human motion; and extending the forecasting horizon to days, targeting predictive models of human lives, that may e.g. safeguard routinely work in factory and address memory impairment of the elderly by summarizing their days.

This research includes the collaborations with the Technical University of Munich (Germany), the University of Verona, the University of Catania, the University of Padua, and the Nvidia R&D Labs

Earthquake forecasting

Among the fields of applicability of forecasting, earthquake forecasting has the potential to impact a large number of human lives. Our team has been among the first to have studied earthquake acoustic waveforms, to denoise them [**Trappolini et al. JGR'24, EGU'24, EGU'23**], and to foresee upcoming shocks [**Laurenti et al. EPS-Letters'22, EGU'24, EGU'23, EGU'22**].

This research includes the collaborations with the Los Alamos National Laboratories, USA, the Pennsylvania State University, USA, the Geoscience Department at Sapienza.

Anomaly detection in activities and long-term procedures

Anomaly detection allows to identify the unexpected behavior of people (sudden illness or misbehavior) and to guide them safely (detecting hazards and procedural mistakes in smart manufacturing).

We have researched anomaly detection under the realistic assumption of open-set'ness (novel types of failures might occur) and of rare anomalous cases, so training data is mostly representing normalcy. Approaches from our team have ranged from constraining the latent space volume [**Flaborea et al. under sub. PR'24**], to adopting hyperbolic geometry and generative adversarial models [**Flaborea et al. CVPR'23 VAND workshop**], and to designing novel probabilistic diffusion models under the new assumption that both normal and abnormal actions be multimodal [**Flaborea et al. ICCV'23**]. Most recently, we have been first to have modelled procedures (long-term series of actions) by the symbolic reasoning capabilities of large-language models, and to predict anomalous procedures when the current ongoing action does not match what expected [**Flaborea et al. CVPR'24**].

Novel research directions include understanding the action inter-dependencies in complex procedures from videos, reconciling action recognition with multi-modal instruction manuals and web-scale instructional videos, and embedding procedural anomaly detection into the wearable ego-centric cameras of embodied agents.

This research includes the collaboration with the University of Catania.

Generative models of human motion and multi-modal AI

The most recent successes of generative AI find motivation in movie production and editing, text composition which includes digital assistants, music composition, drug discovery and several others.

Recent work from our team extend to synthesize multiple plausible futures from a given motion sequence [**Flaborea et al. ICCV'23, Franco et al. PR'23**] and procedural actions from given initial activities. Our most recent work on the generation of human motion from textual inputs has just been accepted [**Sampieri et al. Accepted to ECCV'24**].

Research directions include the generation of multiple people in interaction and contextualized within a scene, following up recent forecasting work of ours [**Scofano et al. NPL'24, Scofano et al. BMVC'23**]. Further directions include multi-modal aspects such as including text, image, videos and sound, and efficiency, i.e. addressing the current limitation of training and inference of the de facto state-of-the-art latent diffusion models. Also, future research involves the alignment of the generation model with human or AI-based feedback. Research collaborations include Nvidia R&D labs and the Technical University of Munich. Part of our research additionally focusses on supporting regulators, in collaboration with the Law Department in Sapienza and the University of Macerata.

Meta-learning, person re-identification, person search

Meta-learning is an appealing branch of machine learning that aims to "learn how to learn", i.e. learn novel concepts and tasks from a few examples, making existing tasks adaptable to novel applications and scenarios. The task has similarities with few-shot learning and person re-identification, i.e. recognizing a previously unknown person from a given picture, and person search, i.e. additionally detecting and localizing people in images and videos.

Our research has been the first to bring together meta-learning and person re-identification [**Munjal et al PR'22**], to review few-shot object detection [**Antonelli et al. ACM Surveys'22**], to leverage re-identification for tracking [**Munjal et al. IMAVIS et al.'20**], and to design end-to-end person search and person re-identification models [**Munjal et al. BMVC'20, – BMVC'19, - CVPR'19**].

Novel research directions include the use of meta-learning and few-shot learning for improving tracking and forecasting, and for personalizing forecasting models.

Object detection, recognition and segmentation

Object detection and recognition is currently the most mature piece of research from the computer vision and machine learning fields, which has reached industry-level accuracy. Autonomous driving stands as one of the most impactful applications.

Our research has considered the modern challenges of domain adaptation and generalization [**Saltori et al. TPAMI'23**] in the context of 3D detection [**Saltori et al. ECCV'22 GIPSO**, **Saltori et al. ECCV'22 CoSMix**], and classification [**Robbiano et al. WACV'22**]. We have additionally researched and transferred technology into technological applications for the case of top-view people detection [**Demirkus et al. VISAPP'17**] and surveillance-view car detection [**Amin and Galasso AVSS'17**], winner of the best detector award at the DETRAC challenges in 2017 and 2018. My research has pioneered novel theory on including video segmentation by clustering pixels while preserving the overall problem objective [**Khoreva et al. ECCV'16**, – **CVPR'15**, – **GCPR'14**; **Galasso et al. CVPR'14**, – **ICCV'13**, – **ACCV'12**].

Research collaborations include Paris Telecom (France), the University of Trento, the Turin Polytechnic, the Max Planck Institute for Informatics (Germany), the University of Freiburg (Germany) and OSRAM (Germany).

Efficient Inference, labelling, and data privacy

The application of deep neural network models in industry and on embedded devices is hindered by the large computational requirements, esp. runtime and memory, by the limitation in labelling data, and by the limitations of certain institutes (e.g. hospitals) to share data.

Our research has considered architecture search [**Robbiano et al. WACV'22**] and model compression [**Belagiannis et al. ECCV'18**] for improving efficiency at training and at inference. Also our research has considered label propagation for reducing labelling time [**Badrinarayanan et al. CVPR'10**] and for generating pseudo labels [**Saltori et al. 3DV'20**]. Finally, research has considered federated learning [**Caldarola et al. CVPR'23 workshop**] as a framework to address data privacy.

Part X – Summary of Scientific Achievements

IX A – Indexes and Impact of publications

Journal metrics

Total impact factor (IF)	96.8 (sum of IF's of journals, ref. WOS)
Average impact factor (IF)	9.68 (total IF / number of journals, ref. WOS)
Total number of peer-reviewed journal publications	11 (ref. Google Scholar) 10 (ref. Scopus)
- of which Q1 journals	7

Conference metrics

Total number of peer-reviewed conference publications	50 (ref. Google Scholar) 42 (ref. Scopus)
- of which at rank A* conferences	11
- of which at rank A conferences	14
- of which at rank B conferences	6
- of which at the top-3 CV and ML venues (CVPR, ICCV, ECCV, NeurIPS, ICML, ICLR)	15
Participation as speaker to conferences	25

Overall metrics

Total number of publications	52 (ref. Scopus, from 9/2007 to 7/2024)
Hirsch index	18 (ref. Scopus) 24 (ref. Google Scholar)
Academic seniority (Number of completed years from PhD start)	18 (this includes ~5 years in industry, in OSRAM from 09/14 to 07/19)
Normalized H index (H index divided by the academic seniority)	1 (ref. Scopus) 1.33 (ref. Google Scholar)
I10-index	40 (ref. Google Scholar)
Total number of citations	1,459, cited by 1,253 documents (ref. Scopus) 2758 (ref. Google Scholar)
Average number of citations per publication	28 (ref. Scopus)

Please note: the top-tier computer vision (CV) conferences (CVPR, ICCV and ECCV) and machine learning (ML) conferences (NeurIPS, ICML, ICLR) are as impactful as top journals (or more). These CV and ML conferences rank consistently among most impactful publications across Computer Science:

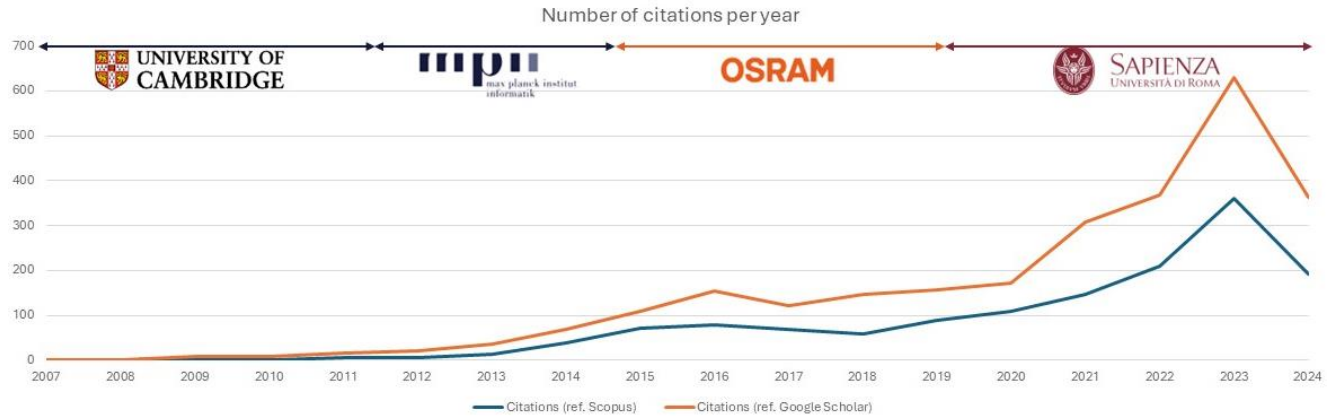
Rank	Publication venues from Engineering and Computer Science	h5-index	h5-median
1.	IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)	422	681
2.	Advanced Materials	326	415
3.	Neural Information Processing Systems (NeurIPS)	309	503
4.	International Conference on Learning Representations (ICLR)	303	563
5.	International Conference on Machine Learning (ICML)	254	463
6.	Journal of Cleaner Production	246	321
7.	European Conference on Computer Vision (ECCV)	238	390
8.	Advanced Energy Materials	236	312
9.	IEEE Access	233	350
10.	Advanced Functional Materials	230	312
11.	IEEE/CVF International Conference on Computer Vision (ICCV)	228	366

Source: https://scholar.google.com/citations?view_op=top_venues&hl=en&vq=eng

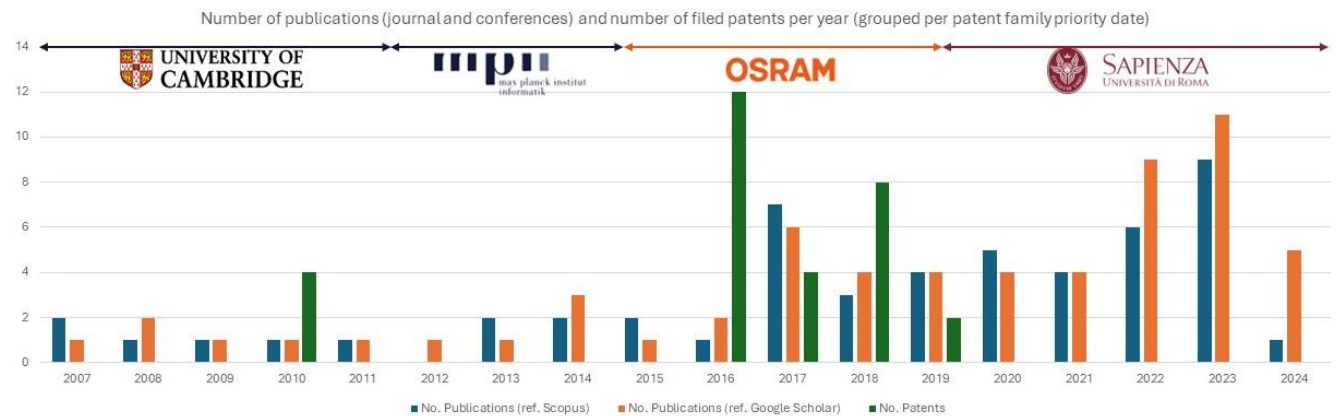
X B – Indexes and Impact of Technological Transfer

Total number of granted patents	30 (from 4/2010 to 7/2024)
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Citations (ref [Scopus](#) and [Google Scholar](#)) are reported in the plot below, with superposed academic (University of Cambridge, MPI for Informatics and Sapienza) or industrial affiliation (OSRAM)



Additionally, the plot below shows the number of published articles (ref [Scopus](#) and [Google Scholar](#)) and the technological transfer (green bars are the number of filed patents, grouped by priority dates of the patent families), mostly filed during the period in Industry (OSRAM)



X C – Team Lead, Academic service and Funding Statistics

Head of the Perception and Intelligence lab (PINLab, www.pinlab.org), since 09/2019

Number of non-tenured assistant professors (RTDA)	1
Number of PhD students	14
Number of Master's students	6
Number of PhD Alumni students (10/2019—05/2024)	5
Number of Master's Alumni (3/2020—05/2024)	29

International Academic Service

Program chair	1
Area and associate chair	19
- of which at rank A* conferences	5
Industrial Chair	3
Participation in PhD School Committee	13
Organization of workshop at international conferences	5

Academic Service at Sapienza include:

- lecturing courses for 15 CFU per year since 2020, and additionally organizing two training camps at Data Science, equivalent to 3 CFU per year;
- participating in the PhD committee of Data Science;
- being part in commissions regarding the strategic organization of the Data Science master degree, including the assessment of machine learning objectives and courses across the degree, and the general objectives of the degree (comitato d'indirizzo);
- supporting the organization of the Industry Liaison Program of Data Science, bringing together companies and students;
- regularly taking part in Degree Sessions both in Computer Science and in Data Science;
- regularly serving in commissions for the evaluation of candidates for scholarships and post-doc contracts (assegna di ricerca);
- regularly creating scholarships and post-doc contracts from personally managed funds to support the group research (~2 per year from 2020)

Current national and international, academic and industrial group collaborations (see Sec X):

Number of International academic collaborators	≥10
Number of national academic collaborators	≥10
Number of national and international industrial collaborators:	≥8

Co-founder and co-director of the Sapienza Start-up ItalAI S.r.l. (<https://italailabs.com/>), since 01/2024

Number of tenured employees	2
Number of part-time non-tenured employees	1
Number of Master's thesis collaborations	2
Number of incoming PhD students (co-funded position)	1
Number of interns	1

Head of the Department of Computer Vision (OSRAM), from 09/2014 to 07/2019

Number of engineers and research scientists	9
Number of PhD alumni (11/2015—02/2023)	3
Number of Master's Alumni (9/2014—07/2019)	5
Number of transferred products	1

Funding statistics

Funds acquired while in Sapienza Total of funding for projects where in the role of PI, and personal participation funding for projects where in the role of participant	1672k EUR	09/20219 – current
Total number of external acquired PhD scholarships while in Sapienza From academic and industrial sponsorships, national and international projects where in the role of PI	8	09/20219 – current
Funds acquired while in OSRAM Total of funding for projects where in the role of PI	2800k EUR	09/20214 – 07/2019)

Part XI – 15 Selected Publications

No.	Year	Publication
1	2023	<p>Cristiano Saltori, Fabio Galasso, Giuseppe Fiameni, Nicu Sebe, Fabio Poiesi, and Elisa Ricci Compositional Semantic Mix for Domain Adaptation in Point Cloud Segmentation <i>IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI)</i> DOI: doi.org/10.1109/TPAMI.2023.3310261; August 2023 Journal Impact factor (2023): 20.8 (source WOS) Journal Quartile: Q1 [ieee web]</p>
2	2023	<p>Luca Franco, Leonardo Placidi, Francesco Giuliani, Irtiza Hasan, Marco Cristani, Fabio Galasso Under the Hood of Transformer Networks for Trajectory Forecasting In Pattern Recognition <i>Pattern Recognition</i> DOI: 10.1016/j.patcog.2023.109372; March 2023 Journal Impact factor (2023): 7.5 (source WOS) Journal Quartile: Q1 [link to web][DOI]</p>
3	2023	<p>B. Prenkaj, D. Aragona, A. Flaborea, F. Galasso, S. Gravina, L. Podo, E. Reda, P. Velardi A self-supervised algorithm to detect signs of social isolation in the elderly from daily activity sequences <i>Artificial Intelligence in Medicine</i> DOI: 10.1016/j.artmed.2022.102454; ISSN: 0933-3657; January 2023 Journal Impact factor (2023): 6.1 (source WOS) Journal Quartile: Q1 [sciencedirect web]</p>
4	2022	<p>B. Munjal, A. Flaborea, S. Amin, F. Tombari and F. Galasso Query-Guided Networks for Few-shot Fine-grained Classification and Person Search <i>Pattern Recognition</i> DOI: 10.1016/j.patcog.2022.109049; ISSN: 0031-3203; September 2022 Journal Impact factor (2022): 8.0 (source WOS) Journal Quartile: Q1 [link to web][sciencedirect web]</p>
5	2022	<p>S. Antonelli, D. Avola, L. Cinque, D. Crisostomi, G.L. Foresti, F. Galasso, M.R. Marini, A. Mecca, D. Pannone Few-Shot Object Detection: A Survey <i>Association for Computing Machinery ACM Surveys</i> DOI: 10.1145/3519022; ISSN: 0360-0300; January 2022 Impact factor (2022): 16.6 (source WOS) Quartile: Q1 [link to web] [link to pdf]</p>

- 6 2021 I. Hasan, F. Setti, T. Tsesmelis and V. Belagiannis and S. Amin and A. Del Bue, M. Cristani and F. Galasso
Forecasting People Trajectories and Head Poses by Jointly Reasoning on Tracklets and Vislets
IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI)
Volume: 43; Issue: 4; Pages: 1267-1278; ISSN: 0162-8828
DOI: 10.1109/TPAMI.2019.2949414; April 2021
Journal Impact factor (2021): 24.3 (source WOS)
Journal Quartile: Q1
[\[link to web\]](#)[\[ieee web\]](#)
- 7 2023 Alessandro Flaborea, Luca Collorone, Guido Maria D'Amely di Melendugno, Stefano D'Arrigo, Bardh Prenkaj, Fabio Galasso
Multimodal Motion Conditioned Diffusion Model for Skeleton-based Video Anomaly Detection
In Proc. *International Conference on Computer Vision (ICCV)*
Paris, France, October 2023
Conference rank: A* (source CORE2023)
- 8 2023 Luca Franco, Paolo Mandica, Bharti Munjal, Fabio Galasso
Hyperbolic self-paced learning for self-supervised skeleton-based action representations
In Proc. *International Conference on Learning Representations (ICLR)*
Kigali, Rwanda, May 2023
Conference rank: A* (source CORE2023)
- 9 2022 Alessio Sampieri, Guido Maria D'Amely di Melendugno, Andrea Avogaro, Federico Cunico, Francesco Setti, Geri Skenderi, Marco Cristani and Fabio Galasso
Pose Forecasting in Industrial Human-Robot Collaboration
In Proc. *European Conference on Computer Vision (ECCV)*
Tel Aviv, Israel, October 2022
[\[link to web\]](#)
Conference rank: A* (source CORE2023)
- 10 2022 Cristiano Saltori, Evgeny Krivosheev, Stéphane Lathuilière, Nicu Sebe, Fabio Galasso, Giuseppe Fiameni, Elisa Ricci, Fabio Poiesi
GIPSO: Geometrically Informed Propagation for Online Adaptation in 3D LiDAR Segmentation
In Proc. *European Conference on Computer Vision (ECCV)*
Tel Aviv, Israel, October 2022
Conference rank: A* (source CORE2023)
[\[link to web\]](#)
- 11 2022 Cristiano Saltori, Fabio Galasso, Giuseppe Fiameni, Nicu Sebe, Elisa Ricci, Fabio Poiesi
CoSMix: Compositional Semantic Mix for Domain Adaptation in 3D LiDAR Segmentation
In Proc. *European Conference on Computer Vision (ECCV)*
Tel Aviv, Israel, October 2022
Conference rank: A* (source CORE2023)
[\[link to web\]](#)

- 12 2021 Theodoros Sofianos, Alessio Sampieri, Luca Franco and Fabio Galasso
Space-Time-Separable Graph Convolutional Network for Pose Forecasting
In Proc. *International Conference on Computer Vision (ICCV)*
Virtual, October 2021
(Acceptance rate 25.9%)
Conference rank: A* (source CORE2021)
[\[link to web\]](#)
- 13 2019 Barathi Munjal, Sikandar Amin, Federico Tombari and Fabio Galasso
Query-guided End-to-End Person Search
In Proc. *IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
Long Beach, USA, June 2019
(Acceptance rate 25.2%) [\[link to pdf\]](#)
Conference rank: A* (source CORE2020)
[\[link to web\]](#)
- 14 2018 I. Hasan, F. Setti, T. Tsesmelis, A. Del Bue, F. Galasso, M. Cristani
MX-LSTM: mixing tracklets and vislets to jointly forecast trajectories and head poses
In Proc. *IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
Salt Lake City, USA, June 2018
(spotlight oral presentation acceptance rate 6.6%)
Conference rank: A* (source CORE2018)
[\[link to web\]](#)
- 15 2015 Anna Khoreva, Fabio Galasso, Matthias Hein and Bernt Schiele
Classifier Based Graph Construction for Video Segmentation
In Proc. *IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
Boston (MA), USA, June 2015
Conference rank: A (source CORE2017)
[\[link to web\]](#)

Part XII – List of All Publications

XII A – Peer reviewed international journals

- 2024 Luca Scofano, Alessio Sampieri, Giuseppe Re, Matteo Almanza, Alessandro Panconesi, Fabio Galasso
About latent roles in forecasting players in team sports
Neural Processing Letters (NPL)
DOI: <https://doi.org/10.1007/s11063-024-11532-0>; February 2024
Journal Impact factor (2023): 2.6 (source WOS)
Journal Quartile: Q3
[\[web\]](#)
- 2024 Daniele Trappolini, Laura Laurenti, Giulio Poggiali, Elisa Tinti, Fabio Galasso, Alberto Michelini, Chris Marone
Cold Diffusion Model for seismic denoising
Journal of Geophysical Research (JGR): Machine Learning and Computation
DOI: <https://doi.org/10.1029/2024JH000179>; May 2024
Journal Impact factor: not yet available
(according to the editor, JGR journals have an average impact factor of 7 in 2023)
[\[web\]](#)
- 2023 Cristiano Saltori, Fabio Galasso, Giuseppe Fiameni, Nicu Sebe, Fabio Poiesi, and Elisa Ricci
Compositional Semantic Mix for Domain Adaptation in Point Cloud Segmentation
IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI)
DOI: doi.org/10.1109/TPAMI.2023.3310261; August 2023
Journal Impact factor (2023): 20.8 (source WOS)
Journal Quartile: Q1
[\[ieee web\]](#)
- 2023 Luca Franco, Leonardo Placidi, Francesco Giuliari, Irtiza Hasan, Marco Cristani, Fabio Galasso
Under the Hood of Transformer Networks for Trajectory Forecasting In Pattern Recognition
Pattern Recognition
DOI: [10.1016/j.patcog.2023.109372](https://doi.org/10.1016/j.patcog.2023.109372); March 2023
Journal Impact factor (2023): 7.5 (source WOS)
Journal Quartile: Q1
[\[link to web\]](#)[\[DOI\]](#)
- 2023 B. Prenkaj, D. Aragona, A. Flaborea, F. Galasso, S. Gravina, L. Podo, E. Reda, P. Velardi
A self-supervised algorithm to detect signs of social isolation in the elderly from daily activity sequences
Artificial Intelligence in Medicine
DOI: [10.1016/j.artmed.2022.102454](https://doi.org/10.1016/j.artmed.2022.102454); ISSN: 0933-3657; January 2023
Journal Impact factor (2023): 6.1 (source WOS)
Journal Quartile: Q1
[\[sciencedirect web\]](#)

- 2022 B. Munjal, A. Flaborea, S. Amin, F. Tombari and F. Galasso
Query-Guided Networks for Few-shot Fine-grained Classification and Person Search
Pattern Recognition
DOI: 10.1016/j.patcog.2022.109049; ISSN: 0031-3203; September 2022
Journal Impact factor (2022): 8.0 (source WOS)
Journal Quartile: Q1
[\[link to web\]](#)[\[sciencedirect web\]](#)
- 2022 Laura Laurenti, Elisa Tinti, Fabio Galasso, Luca Franco, and Chris Marone
Deep learning for laboratory earthquake prediction and autoregressive forecasting of fault zone stress
Earth and Planetary Science Letters
DOI: 10.1016/j.epsl.2022.117825; September 2022
Journal Impact factor (2022): 5.3 (source WOS)
Journal Quartile: Q1
[\[link to web\]](#)
- 2022 S. Antonelli, D. Avola, L. Cinque, D. Crisostomi, G.L. Foresti, F. Galasso, M.R. Marini, A. Mecca, D. Pannone
Few-Shot Object Detection: A Survey
Association for Computing Machinery ACM Surveys
DOI: 10.1145/3519022; ISSN: 0360-0300; January 2022
Impact factor (2022): 16.6 (source WOS)
Quartile: Q1
[\[link to web\]](#) [\[link to pdf\]](#)
- 2021 I. Hasan, F. Setti, T. Tsesmelis and V. Belagiannis and S. Amin and A. Del Bue, M. Cristani and F. Galasso
Forecasting People Trajectories and Head Poses by Jointly Reasoning on Tracklets and Vislets
IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI)
Volume: 43; Issue: 4; Pages: 1267-1278; ISSN: 0162-8828
DOI: 10.1109/TPAMI.2019.2949414; April 2021
Journal Impact factor (2021): 24.3 (source WOS)
Journal Quartile: Q1
[\[link to web\]](#)[\[ieee web\]](#)
- 2021 T. Tsesmelis, I. Hasan, M. Cristani, A. Del Bue and F. Galasso
An integrated light management system with real-time light measurement and human perception
Light Research & Technology (LTR)
Volume: 53; Issue: 1; Pages: 74-88
DOI: 10.1177/1477153520947464; January 2021
Journal Impact factor (2021): 2.767 (source WOS)
Journal Quartile: Q3
[\[link to web\]](#)[\[sage web\]](#)
- 2020 B. Munjal, A. R. Aftab, S. Amin, M. D. Brandlmaier, F. Tombari and F. Galasso
Joint Detection and Tracking in videos with Identification Features
Image and Vision Computing (IMAVIS)
Volume 100; ISSN: 0262-8856;
DOI: 10.1016/j.imavis.2020.103932; August 2020
Journal Impact factor (2021): 2.818 (source WOS)
Journal Quartile: Q2
[\[link to web\]](#)[\[sciencedirect web\]](#)

XII B – Peer-reviewed international conferences:

- 2024 Alessandro Flaborea, Guido Maria D'Amely di Melendugno, Leonardo Plini, Luca Scofano, Edoardo De Matteis, Antonino Furnari, Giovanni Maria Farinella, Fabio Galasso
PREGO: online mistake detection in PRocedural EGOcentric videos
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
Seattle, WA, USA, June 2024
Conference rank: A* (source CORE2023)
- 2024 Alessio Sampieri, Alessio Palma, Indro Spinelli, Fabio Galasso
Length-Aware Motion Synthesis via Latent Diffusion
Accepted to the *European Conference on Computer Vision (ECCV)*
Milan, Italy, October 2024
Conference rank: A* (source CORE2023)
- 2024 Guido M. D'Amely di Melendugno, Alessandro Flaborea, Pascal Mettes, Fabio Galasso
Hyp2Nav: Hyperbolic Planning and Curiosity for Crowd Navigation
Accepted to the *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*
Abu Dhabi, UAE, October 2024
(Selected for *oral presentation*)
Conference rank: A (source CORE2023)
- 2024 Luca Franco, Paolo Mandica, Konstantinos Kallidromitis, Devin Guillory, Yu-Teng Li, Trevor Darrell, Fabio Galasso
Hyperbolic Active Learning for Semantic Segmentation under Domain Shift
Accepted to the *International Conference on Machine Learning (ICML)*
Vienna, Austria, July 2024
Conference rank: A* (source CORE2023)
- 2024 Laura Laurenti, Christopher Johnson, Elisa Tinti, Fabio Galasso, Paul Johnson, Chris Marone
Deep learning to predict time to failure of lab foreshocks and earthquakes from fault zone raw acoustic emissions
In *Proc. European Geosciences Union (EGU) General Assembly*
Vienna, Austria, May 2024
- 2024 Gabriele Paoletti, Laura Laurenti, Elisa Tinti, Fabio Galasso, Cristiano Collettini, Chris Marone
Further investigations in Deep Learning for earthquake physics: Analyzing the role of magnitude and location in model performance
In *Proc. European Geosciences Union (EGU) General Assembly*
Vienna, Austria, May 2024
- 2023 Alessandro Flaborea, Luca Collorone, Guido Maria D'Amely di Melendugno, Stefano D'Arrigo, Bardh Prenkaj, Fabio Galasso
Multimodal Motion Conditioned Diffusion Model for Skeleton-based Video Anomaly Detection
In *Proc. International Conference on Computer Vision (ICCV)*
Paris, France, October 2023
Conference rank: A* (source CORE2023)

- 2023 Luca Scofano, Alessio Sampieri, Elisabeth Schiele, Edoardo De Matteis, Laura Leal-Taixé, Fabio Galasso
Staged Contact-Aware Global Human Motion Forecasting
In *Proc. British Machine Vision Conference (BMVC)*
Aberdeen, United Kingdom, November 2023
(Selected for *oral presentation*)
Conference rank: A (source CORE2023)
- 2023 Muhammad Rameez Ur Rahman, Luca Scofano, Edoardo De Matteis, Alessandro Flaborea, Alessio Sampieri, Fabio Galasso
Best Practices for 2-Body Pose Forecasting
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition Workshops (CVPR-wks)*
Vancouver, British Columbia, Canada, June 2023
(*Best paper of the workshop*)
- 2023 Alessandro Flaborea, Bardh Prenkaj, Bharti Munjal, Marco Aurelio Sterpa, Dario Aragona, Luca Podo, Fabio Galasso
Are we certain it's anomalous?
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition Workshops (CVPR-wks)*
Vancouver, British Columbia, Canada, June 2023
- 2023 Luca Franco, Paolo Mandica, Bharti Munjal, Fabio Galasso
Hyperbolic self-paced learning for self-supervised skeleton-based action representations
In *Proc. International Conference on Learning Representations (ICLR)*
Kigali, Rwanda, May 2023
Conference rank: A* (source CORE2023)
- 2023 Luca Scofano, Alessio Sampieri, Giuseppe Re, Matteo Almanza, Alessandro Panconesi, Fabio Galasso
About latent roles in forecasting players in team sports
In *Proc. International Conference on Learning Representations Workshops (ICLR-wks)*
Kigali, Rwanda, May 2023
- 2023 Laura Laurenti, Gabriele Paoletti, Elisa Tinti, Fabio Galasso, Luca Franco, Cristiano Collettini, Chris Marone
Using Deep Learning to understand variations in fault zone properties: distinguishing foreshocks from aftershocks
In *Proc. EGU General Assembly 2023*
Vienna, Austria, May 2023
[\[link to web\]](#)[\[DOI\]](#)
- 2023 Daniele Trappolini, Laura Laurenti, Elisa Tinti, Fabio Galasso, Chris Marone, and Michelini Alberto
DiffSD: Diffusion models for seismic denoising
In *Proc. EGU General Assembly 2023*
Vienna, Austria, May 2022
[\[link to web\]](#)[\[DOI\]](#)

- 2022 Alessio Sampieri, Guido Maria D'Amely di Melendugno, Andrea Avogaro, Federico Cunico, Francesco Setti, Geri Skenderi, Marco Cristani and Fabio Galasso
Pose Forecasting in Industrial Human-Robot Collaboration
In *Proc. European Conference on Computer Vision (ECCV)*
Tel Aviv, Israel, October 2022
[\[link to web\]](#)
Conference rank: A* (source CORE2023)
- 2022 Cristiano Saltori, Evgeny Krivosheev, Stéphane Lathuilière, Nicu Sebe, Fabio Galasso, Giuseppe Fiameni, Elisa Ricci, Fabio Poiesi
GIPSO: Geometrically Informed Propagation for Online Adaptation in 3D LiDAR Segmentation
In *Proc. European Conference on Computer Vision (ECCV)*
Tel Aviv, Israel, October 2022
[\[link to web\]](#)
Conference rank: A* (source CORE2023)
- 2022 Cristiano Saltori, Fabio Galasso, Giuseppe Fiameni, Nicu Sebe, Elisa Ricci, Fabio Poiesi
CoSMix: Compositional Semantic Mix for Domain Adaptation in 3D LiDAR Segmentation
In *Proc. European Conference on Computer Vision (ECCV)*
Tel Aviv, Israel, October 2022
[\[link to web\]](#)
Conference rank: A* (source CORE2023)
- 2022 Luca Robbiano, Muhammad Rameez Ur Rahman, Fabio Galasso, Barbara Caputo and Fabio Maria Carlucci
Adversarial Branch Architecture Search for Unsupervised Domain Adaptation
In *Proc. IEEE Winter Conference on Applications of Computer Vision (WACV)*
Waikoloa, Hawaii, January 2022
(Acceptance rate 35%)
[\[link to web\]](#)
Conference rank: A (source CORE2023)
- 2022 Laura Laurenti, Elisa Tinti, Fabio Galasso, Luca Franco, Chris Marone
Deep learning for laboratory earthquake prediction and autoregressive forecasting of fault zone stress
In *Proc. EGU General Assembly 2022*
Vienna, Austria, May 2022
[\[link to web\]](#)
- 2022 Daniele Trappolini, Luca Scofano, Alessio Sampieri, Francesco Messina, Fabio Galasso, Saverio Di Fabio, Frank Silvio Marzano
Mesoscale precipitation nowcasting from weather radar data using space-time-separable graph convolutional networks
In *Proc. EGU General Assembly 2022*
Vienna, Austria, May 2022
[\[link to web\]](#)
- 2021 Theodoros Sofianos, Alessio Sampieri, Luca Franco and Fabio Galasso
Space-Time-Separable Graph Convolutional Network for Pose Forecasting
In *Proc. International Conference on Computer Vision (ICCV)*
Virtual, October 2021
(Acceptance rate 25.9%)
[\[link to web\]](#)
Conference rank: A* (source CORE2021)

- 2021 Debora Caldarola, Massimiliano Mancini, Fabio Galasso, Marco Ciccone, Emanuele Rodolà, Barbara Caputo
Cluster-driven Graph Federated Learning over Multiple Domains
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR) Workshop on Learning from Limited or Imperfect Data (L²ID)*
Virtual, June 2021
[\[link to web\]](#)
- 2020 Cristiano Saltori, Stéphane Lathuilière, Nicu Sebe, Elisa Ricci and Fabio Galasso
SF-UDA-3D: Source-Free Unsupervised Domain Adaptation for LiDAR-Based 3D Object Detection
In *Proc. International Conference on 3D Vision (3DV)*
Fukuoka, Japan, November 2020
(Acceptance rate 43.4%) [\[link to web\]](#)
- 2020 Francesco Giuliari, Irtiza Hasan, Marco Cristani and Fabio Galasso
Transformer Networks for Trajectory Forecasting
In *Proc. International Conference on Pattern Recognition (ICPR)*
Milan, Italy, January 2021
[\[link to web\]](#)
Conference rank: B (source CORE2020)
- 2020 Barathi Munjal, Sikandar Amin and Fabio Galasso
Class Interference Regularization
In *Proc. British Machine Vision Conference (BMVC)*
Birmingham, UK, September 2020
[\[link to web\]](#)
Conference rank: A (source CORE2023)
- 2019 Barathi Munjal, Sikandar Amin, Federico Tombari and Fabio Galasso
Query-guided End-to-End Person Search
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
Long Beach, USA, June 2019
(Acceptance rate 25.2%) [\[link to pdf\]](#)
Conference rank: A* (source CORE2020)
- 2019 Barathi Munjal, Fabio Galasso and Sikandar Amin
Knowledge Distillation for End-to-End Person Search
In *Proc. British Machine Vision Conference (BMVC)*
Cardiff, UK, September 2019
(Acceptance rate 28%) [\[link to web\]](#)
Conference rank: A (source CORE2023)
- 2019 T. Tsesmelis, I. Hasan, M. Cristani, A. Del Bue, F. Galasso
Human-centric light sensing and estimation from RGBD images: The invisible light switch
In *IEEE Winter Conference on Applications of Computer Vision (WACV)*
Hawaii, USA, January 2019
Conference rank: A (source CORE2020)
- 2019 T. Tsesmelis, I. Hasan, M. Cristani, F. Galasso, A. Del Bue
RGBD2lux: Dense light intensity estimation with an RGBD sensor
In *IEEE Winter Conference on Applications of Computer Vision (WACV)*
Hawaii, USA, January 2019
Conference rank: A (source CORE2020)

- 2018 Vasileios Belagiannis, Azade Farshad and Fabio Galasso
Adversarial Network Compression
In *Proc. European Conference on Computer Vision (ECCV) - CEFRL Workshop*
Munich, Germany, September 2018
- 2018 I. Hasan, F. Setti, T. Tsesmelis, A. Del Bue, M. Cristani, F. Galasso
"Seeing is Believing": Pedestrian Trajectory Forecasting Using Visual Frustum of Attention
In *Proc. IEEE Winter Conf. on Applications of Computer Vision (WACV)*
Lake Tahoe, USA, March 2018
(Acceptance rate 37%)
Conference rank: A (source CORE2018)
- 2018 I. Hasan, F. Setti, T. Tsesmelis, A. Del Bue, F. Galasso, M. Cristani
MX-LSTM: mixing tracklets and vislets to jointly forecast trajectories and head poses
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
Salt Lake City, USA, June 2018
(spotlight oral presentation acceptance rate 6.6%)
Conference rank: A* (source CORE2018)
- 2017 T. Tsesmelis, I. Hasan, M. Cristani, A. Del Bue, F. Galasso
LIT: a system and benchmark for light understanding
In *Proc. International Conference on Computer Vision (ICCV) Workshop on Color and Photometry in Computer Vision*
Venice, Italy, October 2017
- 2017 I. Hasan, T. Tsesmelis, F. Galasso, A. Del Bue, M. Cristani
Tiny Head Pose Classification by Bodily Cues
In *Proc. IEEE International Conference on Image Processing (ICIP)*
Beijing, China, September 2017
(acceptance rate 45%)
Conference rank: B (source CORE2017)
- 2017 Sikandar Amin and Fabio Galasso
Geometric Proposals for Faster R-CNN
In *Proc. IEEE Int. Conf. on Adv. Video and Signal based Surveill. (AVSS) International Workshop on Traffic and Street Surveillance*
1st place in the DETRAC car detection competition
Lecce, Italy, August 2017
Conference rank: B (source CORE2017)
- 2017 I. Hasan, T. Tsesmelis, A. Del Bue, F. Galasso, M. Cristani
Don't turn off the lights: Modelling of human light interaction in indoor environments
In *Proc. International Conference on Image Analysis and Processing (ICIAP) Workshop on Social Signal Processing and Beyond*
Catania, Italy, September 2017
- 2017 M. Demirkus, L. Wang, M. Eschey, H. Kästle and F. Galasso
People Detection in Fish-eye Top-views
In *Proc. Int. Conference on Computer Vision Theory and Applications (VISAPP)*
Porto, Portugal, February 2017
Conference rank: B (source CORE2017)

- 2016 Wei-Chen Chiu, Fabio Galasso and Mario Fritz
Towards Segmenting Consumer Stereo Videos: Benchmark, Baselines and Ensembles
In *Proc. Asian Conference on Computer Vision (ACCV)*
Taipei, Taiwan, November 2016
(acceptance rate 25%)
Conference rank: B (source CORE2017)
- 2016 Anna Khoreva, Rodrigo Benenson, Fabio Galasso, Matthias Hein and Bernt Schiele
Improved Image Boundaries for Better Video Segmentation
In *Proc. European Conference on Computer Vision (ECCV) - IWVS Workshop*
Amsterdam, The Netherlands, October 2016
Conference rank: A (source CORE2017)
- 2015 Anna Khoreva, Fabio Galasso, Matthias Hein and Bernt Schiele
Classifier Based Graph Construction for Video Segmentation
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
Boston (MA), USA, June 2015
(acceptance rate 28%)
Conference rank: A (source CORE2017)
- 2014 Fabio Galasso, Margret Keuper, Thomas Brox and Bernt Schiele
Spectral Graph Reduction for Efficient Image and Streaming Video Segmentation
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
Columbus, Ohio, June 2014
(oral presentation acceptance rate 5.75%)
Conference rank: A (source CORE2014)
- 2014 Anna Khoreva, Fabio Galasso, Matthias Hein and Bernt Schiele
Learning Must-Link Constraints for Video Segmentation based on Spectral Clustering
In *Proc. German Conference on Pattern Recognition (GCPR)*
Münster, Germany, September 2014
(acceptance rate 40%)
- 2013 Fabio Galasso, Naveen Nagaraja, T. Cardenas, Thomas Brox and Bernt Schiele
A Unified Video Segmentation Benchmark: Annotation, Metrics and Analysis
In *Proc. International Conference on Computer Vision (ICCV)*
Sydney, Australia, December 2013
(acceptance rate 28%)
Conference rank: A* (source CORE2013)
- 2012 Fabio Galasso, Roberto Cipolla and Bernt Schiele
Video Segmentation with Superpixels
In *Proc. Asian Conference on Computer Vision (ACCV)*
Daejeon, Korea, November 2012
(acceptance rate 26%)
Conference rank: A (source CORE2013)
- 2011 Fabio Galasso, Masahiro Iwasaki, Kunio Nobori and Roberto Cipolla
Spatio-Temporal Clustering of Probabilistic Region Trajectories
In *Proc. International Conference on Computer Vision (ICCV)*
Barcelona, Spain, November 2011
(acceptance rate 24%)
Conference rank: A* (source CORE2013)

- 2010 Vijay Badrinarayanan, Fabio Galasso and Roberto Cipolla
Label Propagation in Video Sequences
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
San Francisco (CA), USA, June 2010
(acceptance rate 27%)
Conference rank: A (source CORE2013)
- 2009 Fabio Galasso and Joan Lasenby
Fourier Analysis and Gabor Filtering for Texture Analysis and Local Reconstruction of General Shapes
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*
Miami (FL), USA, June 2009
(acceptance rate 26%)
Conference rank: A (source CORE2013)
- 2008 Fabio Galasso and Joan Lasenby
Shape from Texture via Fourier analysis
In *Proc. International Symposium on Visual Computing (ISVC)*
Las Vegas (NV), USA, November 2008
- 2007 Fabio Galasso and Joan Lasenby
Shape from Texture of Developable Surfaces via Fourier Analysis
In *Proc. International Symposium on Visual Computing (ISVC)*
Lake Tahoe (NV/CA), USA, December 2007
- 2007 Fabio Galasso and Joan Lasenby
Shape from Texture: Fast Estimation of Planar Surface Orientation via Fourier Analysis
In *Proc. British Machine Vision Conference (BMVC)*
University of Warwick, UK, September 2007
Conference rank: B (source CORE2008)

XII C – Other international conferences

- 2020 Francesco Giuliari, Irtiza Hasan, Luca Franco, Marco Cristani and Fabio Galasso
Transformer Networks for Trajectory Forecasting
In *Proc. European Conference on Computer Vision (ECCV) – BTFM Workshop*
Edinburgh, United Kingdom, August 2020
- 2018 Our team: Barthi Munjal, Meltem Brandlmaier, Sikandar Amin and Fabio Galasso
UA-DETRAC 2018: Report of Challenge on Advanced Traffic Monitoring
In *Proc. IEEE Int. Conf. on Adv. Video and Signal based Surveill. (AVSS)*
International Workshop on Traffic and Street Surveillance
Auckland, New Zeland, November 2018 [[link to web](#)]
3st place in the [DETRAC](#) car tracking competition
- 2017 Our team: Sikandar Amin and Fabio Galasso
UA-DETRAC 2017: Report of Challenge on Advanced Traffic Monitoring
In *Proc. IEEE Int. Conf. on Adv. Video and Signal based Surveill. (AVSS)*
International Workshop on Traffic and Street Surveillance
Lecce, Italy, August 2017 [[link to web](#)]
1st place in the [DETRAC](#) car detection competition
- 2017 Yi Li, Fabio Galasso and Bernhard Siessegger
True Occupancy Detection: Smart Lighting and Deep Learning Revolution
In *Smart Lighting*
Hamburg, Germany, May 2017
- 2016 Fabio Galasso and Bernhard Siessegger
True Occupancy Detection: Computer Vision meets Smart Lighting
In *Smart Lighting*
Milan, Italy, May 2016
- 2015 Bernhard Siessegger and Fabio Galasso
Beyond Occupancy Detection, Smart Sensors the enablers of tomorrow's Lighting
In *Smart Sensing*
Berlin, Germany, May 2015
- 2014 Thomas Brox, Fabio Galasso, Fuxin Li, James M. Rehg, Bernt Schiele
First International Workshop on Video Segmentation - Panel Discussion
In *Proc. European Conference on Computer Vision (ECCV)- IWVS Workshop*
Zurich, Switzerland, September 2014

XII D – Patents

- 2019 S. Amin, B. Munjal, M Demirkus Brandlmaier, A. R. Aftab, F. Galasso
**Method for common detecting, tracking and classifying of objects
(Verfahren zum gemeinsamen Detektieren, Verfolgen und Klassifizieren von
Objekten)**
US 20220027664 A1, priority date November 14th, 2019 [\[link to web\]](#) [\[link to pdf\]](#)
Additionally filed as DE 102018220274 A1
- 2018 A. Faller, F. Galasso, P. Kuncheerath Ramankutty, M Demirkus Brandlmaier
**Tracking system, arrangement and method for tracking objects
(Verfahren zum gemeinsamen Detektieren, Verfolgen und Klassifizieren von
Objekten)**
DE 10 2018214844 A1, priority date August 8th, 2018 [\[link to web\]](#) [\[link to pdf\]](#)
Additionally filed as US 20210342619 A1, EP 3844666 A1
- 2018 T. Tsesmelis, I. Hasan, F. Galasso, H. Kästle, A. Del Bue, M. Cristani
**A method of measuring illumination, corresponding system and computer
program product**
IT 102018000005381, priority date May 15th, 2018 [\[link to web\]](#) [\[link to pdf\]](#)
Additionally filed and granted as EP 3794910 B1, US 10893594 B2
- 2018 Vasileios Belagiannis, Azade Farshad, Fabio Galasso
**Method for producing a compressed version of an artificial neuronal network
and device and storage medium
(Verfahren zum Erzeugen einer komprimierten Version eines künstlichen
neuronalen Netzwerks sowie Vorrichtung und Speichermedium)**
DE 102018201290 A1, priority date January 29th, 2018 [\[link to web\]](#) [\[link to dpma\]](#)
- 2018 F. Galasso, Y. Li, H. Kästle, L. Wang, B. Siessegger
**Method for automatically controlling at least one device of a building by
means of a building management system and building management system
(Verfahren zum automatischen steuern zumindest eines Geräts eines
Gebäudes mittels eines Gebäudemanagementsystems und
Gebäudemanagementsystem)**
DE 102018202775 A1, priority date February 23th, 2018 [\[link to web\]](#) [\[link to pdf\]](#)
- 2017 L. Wang, H. Kästle, F. Galasso, Y. Li
**Person recognition by way of a camera
(Personenerkennung Mittels einer Kamera)**
DE 102017222675 A1, priority date December 13th, 2017 [\[link to web\]](#) [\[link to pdf\]](#)
Additionally filed and granted as US 20190180597 A1
- 2017 S. Amin, F. Galasso, H. Kästle
**Capturing road users on a traffic route
(Erfassen von Verkehrsteilnehmern auf einem Verkehrsweg)**
DE 102017215079 A1, priority date August 29th, 2017 [\[link to web\]](#) [\[link to pdf\]](#)
- 2017 B. Siessegger, F. Galasso, N. Werneck, H. Kästle
**Surface reconstruction of illuminated objects via photometric stereo
(Oberflächenrekonstruktion Eines Beleuchteten Objekts Mittels
Fotometrischer Stereoanalyse)**
DE 102017213761 A1, priority date August 8th, 2017 [\[link to wipo\]](#) [\[link to pdf\]](#)

- 2016 T. Tsesmelis, I. Hasan, M. Cristani, F. Galasso, A. Del Bue, M. Eschey, H. Kästle
A method of identifying light source, corresponding system and computer program product
(Verfahren zur Identifizierung von Lichtquellen, entsprechendes System und Computerprogrammprodukt)
(Procedimento per identificare sorgenti luminose, sistema e prodotto informatico corrispondenti)
 IT 102016000103146 A1, priority date October 13th, 2016 [\[link to wipo\]](#) [\[link to pdf\]](#)
 Additionally filed and granted as DE112017005207T5, US 10893594 B2
- 2016 I. Hasan, F. Setti, T. Tsesmelis, F. Galasso, A. Del Bue, M. Cristani, M. Eschey, H. Kästle
A method of view frustum detection, corresponding system and computer program product
(Un procedimento per predire una traiettoria e un frustum di vista, corrispondente sistema e prodotto informatico)
 IT 102016000103076 A1, priority date October 13th, 2016 [\[link to wipo\]](#) [\[link to pdf\]](#)
 Additionally filed and granted as US 11175733 B2, DE112017005182T5
- 2016 H. Kästle, M. Demirkus, L. Wang, M. Eschey, F. Galasso
Detection of the presence of static objects
(Praesenzdetektion bei unbewegten objekten)
 DE 102016115414 A1 Priority date August 19th, 2016 [\[link to web\]](#) [\[link to pdf\]](#)
 Additionally filed and granted as EP 3501018 A1, US 10902268 B2
- 2016 H. Kästle, M. Demirkus, L. Wang, M. Eschey, F. Galasso
Training method and detection method for object recognition
(Trainingsverfahren und Erkennungsverfahren zur Objekterkennung)
 DE 102016206817 A1, priority date April 21st, 2016 [\[link to wipo\]](#) [\[link to pdf\]](#)
 Additionally filed and granted as EP 3446281 A1, US 20190130215 A1
- 2010 M. Iwasaki, K. Nobori, A. Komoto, F. Galasso and R. Cipolla
Method and Apparatus for Trajectory Estimation and Method for Segmentation
 US 8948448 B2, priority date March 15th, 2010 [\[link to wipo\]](#) [\[link to pdf\]](#)
 Additionally filed and granted as EP 2548174 B1, CN 102473307 B, JP 5404918 B2

XII E – PhD Thesis

- 2009 Fabio Galasso
Shape-From-Texture: Spectral Distortion Analysis and 3D Reconstruction Algorithms
 PhD Thesis, Submitted on 15th July 2009

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.

Rome
 3/07/2024