ANTONINO FURNARI

Università degli Studi di Catania, Dipartimento di Matematica e Informatica

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BREVE BIOGRAFIA

Antonino Furnari è ricercatore presso l'Università di Catania. Ha conseguito la laurea triennale e magistrale in informatica (entrambe con lode) e il dottorato di ricerca in matematica e informatica rispettivamente nel 2010, 2013 e 2017 presso l'Università di Catania. È membro del gruppo di ricerca IPLAB (Università di Catania) dal 2012 ed è autore di due brevetti e più di 50 articoli in riviste internazionali, atti di convegni internazionali capitoli di libri internazionali. Diversi di tali lavori hanno ottenuto riconoscimenti da conferenze internazionali. In particolare, tre articoli sono stati riconosciuti come TOP-10% dalle conferenze ICIP 2014 (GII-GRIN-SCIE Class 2, Rating A-, 2015), ICIP 2015 (GII-GRIN-SCIE Class 2, Rating A-, 2015), ICIP 2019 (GII-GRIN-SCIE Class 2, Rating A-, 2018) e due lavori sono stati pubblicati come "oral' in ECCV 2018 (TOP-2.42% - GII-GRIN-SCIE Class 1, Rating A+, 2018) e ICCV 2019 (TOP-4.3% - GII-GRIN-SCIE Class 1, Rating A++, 2018). Dal 2017 presta servizio come professore a contratto presso il Dipartimento di Matematica e Informatica dell'Università di Catania, Italia. Nel 2020 e nel 2021 è guest editor della rivista IEEE Transactions on Pattern Analysis and Image Intelligence (TPAMI - Impact Factor 2019: 17.861) per uno special issue su "Egocentric Perception" e della rivista Frontiers in Computer Vision per uno special issue su "Machine Vision for Assistive Technologies". Antonino Furnari ha collaborato all'organizzazione di diversi eventi internazionali, quali la serie di workshop su "Assistive Computer Vision and Robotics (ACVR)" (dal 2016), la scuola internazionale "International Computer Vision Summer School (ICVSS)" (dal 2017) e la serie di wokshop su "Egocentric Perception Interaction and Computing (EPIC)" (dal 2018). È revisore per conferenze internazionali nel campo della visione artificiale e del multimedia, tra cui CVPR, ICCV, WACV, ACM Multimedia, ICRA, ICPR, ICIAP, e per diverse riviste tra cui IEEE Pattern Analysis and Machine Intelligence, International Journal of Computer Vision, Pattern Recognition, IEEE Computer Vision and Image Understanding, Circuits and Systems for Videos Technology e Pattern Recognition Letters. Dal 2016 ha condotto seminari presso università internazionali, tra cui l'università di Bristol (UK), l'università di Berna (CH), l'università dell'Essex (UK), il politecnico federale di Zurigo (ETH - CH), workshop (EgoApp 2019, all'interno di BMVC 2019) e tutorial presso conferenze (VISAPP 2019, VISAPP 2020). Antonino Furnari è membro di IEEE, CVF e CVPL. I suoi interessi di ricerca riguardano Computer Vision, Pattern Recognition e Machine Learning, con particolare attenzione alla First Person Vision.

INDICI BIBLIOMETRICI

INDICI BIBLIOMETRICI DI SCOPUS (ACCESSO AVVENUTO IL 17 GENNAIO 2021)

- H-index: 12
- Numero di articoli su rivista : 14
- Numero di citazioni : 460

INDICI BIBLIOMETRICI DI GOOGLE SCHOLAR (ACCESSO AVVENUTO IL 17 GENNAIO 2021)

- H-index: 15
- Numero di articoli su rivista : 17
- Numero di citazioni : 821

AFFILIAZIONI

MAR. 2020 – PRESENT | **RICERCATORE A TEMPO DETERMINATO (RTD-A)**
Dipartimento di Matematica e Informatica, Università di Catania (IT)
AIM - Attraction and International Mobility. Codice Proposta AIM1893589
Tema di Ricerca : Predizione di azioni e interazioni con oggetti da immagini e video acquisiti mediante telecamere indossabili

APR. 2017 – FEB. 2020 | **ASSEGNISTA**
Dipartimento di Matematica e Informatica, Università di Catania (IT)
Supervisore: Dr. Giovanni Maria Farinella.
Tema di Ricerca: Algoritmi di egocentric vision per la comprensione della scena .

2017 – 2020 | **PROFESSORE A CONTRATTO**
Dipartimento di Matematica e Informatica, Università di Catania (IT)

SEPT. 2015 – NOV. 2015 | **PROFESSORE A CONTRATTO**
Fondazione Istituto Tecnico Superiore "Steve Jobs" (IT)

2013 – 2016 | **STUDENTE DI DOTTORATO IN MATEMATICA E INFORMATICA**
Università di Catania (IT)
Supervisori: Dr. Sebastiano Battiato & Dr. Giovanni Maria Farinella.
Tesi : Context Awareness in First Person Vision.

2013 – PRESENTE | **MEMBRO DEL LABORATORIO CONGIUNTO IPLAB - STMICROELECTRONICS (IT)**
Dipartimento di Matematica e Informatica, Università di Catania (IT)
STMicroelectronics - AST Computer Vision (IT)

2012 – PRESENT | **MEMBRO DEL GRUPPO DI RICERCA IPLAB**
Dipartimento di Matematica e Informatica, Università di Catania (IT)

EDUCAZIONE

2013 – 2016 | **DOTTORATO IN MATEMATICA E INFORMATICA**
Università degli Studi di Catania (IT)
Supervisori: : Dr. Sebastiano Battiato & Dr. Giovanni Maria Farinella.
Tesi : Context Awareness in Egocentric Vision.

2010 – 2013 | **LAUREA MAGISTRALE IN INFORMATICA**
Università degli Studi di Catania (IT)
Tesi : Vehicle Tracking In Real-World Video Sequences.

2006 – 2010 | **LAUREA IN INFORMATICA**
Università degli Studi di Catania (IT)
Tesi : Valutazioni ed ottimizzazioni di design pattern ad aspetti.

ESPERIENZE INTERNAZIONALI

07/01/21 – PRESENTE | **VISITING SCHOLAR (SMART WORKING)**
Facebook AI Research/University of Texas
Supervised by: Dr. Kristen Grauman
Research Topic: Egocentric Vision for Object Interaction Anticipation

30/07/19 | **VISITING SCHOLAR**

30/08/19 | ***University of Bern (CH)***
Supervised by: Dr. Paolo Favaro
Research Topic: Unsupervised Video Representations

26/08/18 | **VISITING SCHOLAR**
07/09/18 | ***University of Essex (UK)***
Supervised by: Dr. Dimitri Ognibene
Research Topic: Egocentric Vision for Robotic Assistance

AUG. 2017 | **VISITING SCHOLAR**
University of Bristol (UK)
Supervised by: Dr. Dima Damen
Research Topic: Egocentric Action Anticipation

MAR. 2016 | **VISITING SCHOLAR**
JUL. 2016 | ***University of Texas at Austin (US)***
Supervised by: Dr. Kristen Grauman
Research Topic: Next Active Object Prediction from Egocentric Videos

PUBBLICAZIONI SELEZIONATE

Questa sezione riporta le pubblicazioni selezionate. Si veda la sezione 11 per la lista completa delle pubblicazioni

RIVISTE INTERNAZIONALI

1. Antonino Furnari e Giovanni Maria Farinella. "Rolling-Unrolling LSTMs for Action Anticipation from First-Person Video". In: IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI) (2020). [IF 2019: 17.861]
2. Dima Damen et al. "The EPIC-KITCHENS Dataset: Collection, Challenges and Baselines". In: IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI) (2020). [IF 2019: 17.861]
3. Antonino Furnari, Sebastiano Battiato e Giovanni Maria Farinella. "Personal-Location-Based Temporal Segmentation of Egocentric Video for Lifelogging Applications". In: Journal of Visual Communication and Image Representation 52 (2018), pp. 1–12. ISSN: 1047-3203. [IF 2018: 2.259]
4. Antonino Furnari et al. "Next-active-object prediction from egocentric videos". In: Journal of Visual Communication and Image Representation 49.Supplement C (2017), pp. 401 –411. ISSN: 1047- 3203. [IF 2017: 1.836]
5. Antonino Furnari et al. "Affine Covariant Features for Fisheye Distortion Local Modeling". In: IEEE Transactions on Image Processing 26.2 (2017), pp. 696–710. ISSN: 1057-7149. [IF 2017: 5.072]

CONFERENZE INTERNAZIONALI

1. Antonino Furnari e Giovanni Maria Farinella. "What Would You Expect? Anticipating Egocentric ActionsWith Rolling-Unrolling LSTMs and Modality Attention". In: International Conference on Computer Vision (ICCV), Long Beach (US), Oct. 27 - Nov. 2. 2019. [**ORAL - TOP 5%**] [GII-GRIN-SCIE Class 1, Rating A++, 2018]
2. Francesco Ragusa, Antonino Furnari, Salvatore Livatino, Giovanni Maria Farinella (2020). The MECCANO Dataset: Understanding Human-Object Interactions from Egocentric Videos in

an Industrial-like Domain. In IEEE Winter Conference on Application of Computer Vision (WACV) [GII-GRIN-SCIE Class 2, Rating A, 2018]

3. D. Damen et al. "Scaling Egocentric Vision: The EPIC-KITCHENS Dataset". In: European Conference on Computer Vision (ECCV), Munich (DE), Sept. 8-14. 2018. [**ORAL - TOP 3%**] [GII-GRIN-SCIE Class 1, Rating A+, 2018]
4. Antonino Furnari e Giovanni Maria Farinella. "Egocentric Action Anticipation by Disentangling Encoding and Inference". In: International Conference on Image Processing (ICIP), Taipei (KR), Sept. 22 - 25, 2019. 2019. [**TOP 10%**] [GII-GRIN-SCIE Class 2, Rating A-, 2018]
5. Antonino Furnari et al. "Generalized Sobel Filters for Gradient Estimation of Distorted Images". In: IEEE International Conference on Image Processing (ICIP), Quebec, Canada, September 27-30. 2015, pp. 3250–3254. [**TOP 10%**] [GII-GRIN-SCIE Class 2, Rating A-, 2015]

ATTIVITÀ PROFESSIONALI

MEMBRO DEL COLLEGIO DEI DOCENTI DI CORSI DI DOTTORATO

04/05/2020 – PRESENTE

MEMBRO DEL COLLEGIO DEI DOCENTI

Corso di dottorato in Informatica, Dipartimento di Matematica e Informatica, Università degli Studi di Catania

TALK PRESSO ENTITÀ INDUSTRIALI, CONFERENZE E ISTITUTI DI RICERCA

9 FEB. 2021

BUILDING THE NEXT GENERATION OF VIRTUAL PERSONAL ASSISTANTS WITH FIRST PERSON (EGOCENTRIC) VISION: FROM VISUAL INTELLIGENCE TO AI AND FUTURE PREDICTIONS

Tutorial to be given at the 16^{th} International Conference on Computer Vision Theory and Applications (VISAPP) 2021

13 DEC. 2020

FIRST PERSON (EGOCENTRIC) FUTURE PREDICTIONS FOR INDUSTRIAL WORKPLACES

AIIS Italian Stories for Maker Faire 2020

28 OCT. 2020

TOWARDS FUTURE PREDICTIONS IN EGOCENTRIC PERCEPTION

Guest lecutre given at the Mixed Reality Lab course, ETH Zurich, 2020

29 FEB. 2020

FIRST PERSON (EGOCENTRIC) VISION: FROM AUGMENTED PERCEPTION TO INTERACTION AND ANTICIPATION

Tutorial given at the 15^{th} International Conference on Computer Vision Theory and Applications (VISAPP) 2020

13 SEPT. 2019

FIRST-PERSON (EGOCENTRIC) VISION FOR USER LOCALIZATION AND INTENTION PREDICTION

Talk given at the University of Bristol - Visual Information Laboratory, Bristol, UK

Hosted by: Prof. Dima Damen

12 SEPT. 2019

EGOCENTRIC VISION: WHERE, WHAT AND WHAT'S NEXT?

Invited Talk at the Workshop on Applications of Egocentric Vision (EgoApp) in conjunction with BMVC 2019, Cardiff, UK

Invited by: Prof. Vittorio Murino, Dr. Maya Aghaei

29 AUG. 2019

SITUATIONAL AWARENESS IN FIRST-PERSON (EGOCENTRIC) VISION THROUGH USER LOCALIZATION AND ACTION ANTICIPATION

Talk given at the University of Bern - Computer Vision Group, Bern, CH
Hosted by: Prof. Paolo Favaro

25 FEB. 2019 | **BUILDING PERSONAL AIS WITH FIRST PERSON (EGOCENTRIC) VISION**
Tutorial given at the 14^{th} International Conference on Computer Vision Theory and Applications (VISAPP) 2019

4 SEPT. 2018 | **LOCALIZATION AND ANTICIPATION FROM FIRST-PERSON (EGOCENTRIC) VISUAL DATA**
Talk given at the University of Essex, Colchester, UK
Hosted by: Dr. Dimitri Ognibene

11 SEPT. 2017 | **LOCATION AND OBJECT AWARENESS IN FIRST PERSON VISION**
Talk given at the "Active Vision and Human Robot Collaboration" tutorial of the ICIAP 2017 conference, Catania, Italy

25 AUG. 2017 | **CONTEXT AWARENESS IN FIRST PERSON VISION**
Talk given at the University of Bristol, UK
Hosted by: Dr. Dima Damen

24 FEB. 2017 | **PREDICTING NEXT ACTIVE OBJECTS FROM FIRST PERSON VIDEOS**
Talk given at AST Computer Vision Group, STMicroelectronics, Catania, IT

7 DEC. 2016 | **CONTEXTUAL AWARENESS IN FIRST PERSON VISION**
Talk given at AST Computer Vision Group, STMicroelectronics, Catania, IT

24 JUNE 2014 | **VEHICLE TRACKING IN REAL-WORLD VIDEO SEQUENCES**
Talk given at AST Computer Vision Group, STMicroelectronics, Catania, IT

MEMBRO DI COMITATI EDITORIALI PRESSO RIVISTE INTERNAZIONALI

2021 | **GUEST EDITOR OF FRONTIERS IN COMPUTER VISION SPECIAL ISSUE**
Guest Editor of the Frontiers in Computer Vision special issue on Machine Vision for Assistive Technologies

2020 | **GUEST EDITOR OF PAMI SPECIAL ISSUE**
Guest Editor of the IEEE Pattern Analysis and Machine Intelligence special issue on Egocentric Perception (Impact Factor 2019: 17.861)

CHAIR DI EVENTI INTERNAZIONALI

2021 | **ICIAP 2021**
Publicity Chair of 21^{st} International Conference on Image Analysis and Processing (ICIAP) 2021.

VISAPP 2021
Area Chair for the 16^{th} International Conference on Computer Vision Theory and Applications (VISAPP) 2021.

2020 | **VISAPP 2020**
Area Chair for the 15^{th} International Conference on Computer Vision Theory and Applications (VISAPP) 2020.

VISAPP 2020

Session Chair for the 15^{th} International Conference on Computer Vision Theory and Applications (VISAPP) 2020. Session: Deep Learning for Visual Understanding

2019

ICIP 2019

Session Chair for the 26^{th} International Conference on Image Processing (ICIP) 2019. Session: AI for Image & Video Understanding III

ICVSS 2019

Academic Assessment Committee for the 13^{th} edition of the International Computer Vision Summer School (ICVSS) 2019

VISAPP 2019

Session Chair for the 14^{th} International Conference on Computer Vision Theory and Applications (VISAPP) 2019. Session: 3D

ACVR 2019

Web and Publicity Chair of the 7^{th} International Workshop on Assistive Computer Vision and Robotics (ACVR) 2019 in conjunction with the International Conference on Computer Vision (ICCV) 2019

2018

ICVSS 2018

Academic Assessment Committee for the 12^{th} edition of the International Computer Vision Summer School (ICVSS) 2018

VINEPA 2018

Web Chair of Variational Inequalities, Nash Equilibrium Problems and Applications (VINEPA) 2018

ACVR 2018

Web and Publicity Chair of the 6^{th} International Workshop on Assistive Computer Vision and Robotics (ACVR) 2018 in conjunction with the European Conference on Computer Vision (ECCV) 2018

2017

ICVSS 2017

Academic Assessment Committee for the 11^{th} edition of the International Computer Vision Summer School (ICVSS) 2017

ACVR 2017

Web and Publicity Chair of the 5^{th} International Workshop on Assistive Computer Vision and Robotics (ACVR) 2017 in conjunction with the International Conference on Computer Vision (ICCV) 2017

ICIAP 2017

Publicity Chair of the 19^{th} International Conference on Image Analysis and Processing (ICIAP) 2017

2016

ACVR 2016

Web and Publicity Chair of the 4^{th} International Workshop on Assistive Computer Vision and Robotics (ACVR) 2016 in conjunction with the European Conference on Computer Vision (ECCV) 2016

VINEPA 2016

Local Arrangements Chair of Variational Inequalities, Nash Equilibrium Problems and Applications (VINEPA) 2016

ORGANIZZATORE DI WORKSHOP INTERNAZIONALI

2021 | **EPIC@CVPR 2021**
Online, date TBA
Organizer of the eigth International Workshop on Egocentric Perception Interaction and Computing (EPIC@CVPR 2021), held in conjunction with the internation conference on Computer Vision and Pattern Recognition (CVPR 2021)

2020 | **ACVR@ECCV 2020**
Glasgow (UK), 28 August 2020
Organizer of the eight International Workshop on Assistive Computer Vision and Robotics (ACVR@ECCV 2020), held in conjunction with the European Conference on Computer Vision (ECCV 2020)

EPIC@ECCV 2020
Glasgow (UK), 23 August 2020
Organizer of the seventh International Workshop on Egocentric Perception Interaction and Computing (EPIC@ECCV 2020), held in conjunction with the European Conference on Computer Vision (ECCV 2020)

EPIC@CVPR 2020
Seattle (US), 15 June 2020
Organizer of the sixth International Workshop on Egocentric Perception Interaction and Computing (EPIC@CVPR 2020), held in conjunction with the internation conference on Computer Vision and Pattern Recognition (CVPR 2020)

2019 | **EPIC@ICCV 2019**
Seoul (KS), 2 November 2019
Organizer of the fifth International Workshop on Egocentric Perception Interaction and Computing (EPIC@ICCV 2019), held in conjunction with the International Conference on Computer Vision (ICCV 2019)

EPIC@CVPR 2019
Long Beach (US), 17 June 2019
Organizer of the fourth International Workshop on Egocentric Perception Interaction and Computing (EPIC@CVPR 2019), held in conjunction with the internation conference on Computer Vision and Pattern Recognition (CVPR 2019)

2018 | **EPIC@ECCV 2018**
Munich (DE), 9 September 2018
Organizer of the third International Workshop on Egocentric Perception Interaction and Computing (EPIC@ECCV 2018), held in conjunction with the European Conference on Computer Vision (ECCV 2018)

MEMBRO DEL PROGRAM COMMITEE DI CONFERENZE INTERNAZIONALI

2020 | **ACMMM 2020**
Program Committee Member of the ACM Multimedia conference (ACMMM) 2020

IJCAI-PRICAI 2020
Program Committee Member of the 29^{th} International Joint Conference on Artificial Intelligence and the 17^{th} Pacific Rim International Conference on Artificial Intelligence (IJCAI-PRICAI) 2020

MMM 2020
Program Committee Member of the 26^{th} International Conference on MultiMedia Modelling (MMM) 2020

MCPR 2020
Program Committee Member of the 12^{th} Mexican Conference on Pattern Recognition (MCPR) 2020

2019

ACMMM 2019
Program Committee Member of the ACM Multimedia conference (ACMMM) 2019

IJCAI 2019
Program Committee Member of the 28^{th} International Joint Conference on Artificial Intelligence (IJCAI) 2019

VISAPP 2019
Program Committee Member of the 14^{th} International Conference on Computer Vision Theory and Applications (VISAPP) 2019

ICIAP 2019
Program Committee Member of the 20^{th} International Conference on Image Analysis and Processing (ICIAP) 2019

IBPRIA 2019
Program Committee Member of 9th Iberian Conference on Pattern Recognition and Image Analysis (IbPRIA) 2019

CIARP 2019
Program Committee Member of the 24^{th} Iberoamerican Congress on Pattern Recognition (CIARP) 2019

MCPR 2019
Program Committee Member of the 11^{th} Mexican Conference on Pattern Recognition (MCPR) 2019

MMM 2019
Program Committee Member of the 25^{th} International Conference on MultiMedia Modelling (MMM) 2019

2018

ACMMM 2018
Program Committee Member of the ACM Multimedia conference (ACMMM) 2018

CIARP 2018
Program Committee Member of the 23^{rd} Iberoamerican Congress on Pattern Recognition (CIARP) 2018

2017

ACMMM 2017
Program Committee Member of the ACM Multimedia conference (ACMMM) 2017

CIARP 2017
Program Committee Member of the 22^{rd} Iberoamerican Congress on Pattern Recognition (CIARP) 2017

MEMBRO DEL PROGRAM COMMITTEE DI WORKSHOP INTERNAZIONALI

2020

EGOAPP 2020

Program Committee Member of the 2^{nd} Workshop on Applications of Egocentric Vision (EgoApp) 2020 in conjunction with the International Conference on Pattern Recognition (ICPR) 2020

VIQA 2020

Program Committee Member of the 1^{st} International Workshop on Video Question Answering and Image Question Answering (VIQA) 2020 in conjunction with the International Conference on Pattern Recognition (ICPR) 2020

W3AS 2020

Program Committee Member of the 2^{nd} Automatic Affect Analysis and Synthesis Workshop (W3AS) 2020

2019

ACVR 2019

Program Committee Member of the 7^{th} International Workshop on Assistive Computer Vision and Robotics (ACVR) 2019 in conjunction with the International Conference on Computer Vision (ICCV) 2019

2018

ACVR 2018

Program Committee Member of the 6^{th} International Workshop on Assistive Computer Vision and Robotics (ACVR) 2018 in conjunction with the European Conference on Computer Vision (ECCV) 2018

VIBE 2018

Program Committee Member of Vision for Interaction and Behaviour understanding (VIBE) 2018, in conjunction with the British Machine Vision Conference (BMVC) 2018

2017

EPIC 2017

Program Committee Member of the second workshop on Egocentric Perception, Interaction and Computing (EPIC) 2017 in conjunction with the International Conference on Computer Vision (ICCV) 2017

ACVR 2017

Program Committee Member of the 5^{th} International Workshop on Assistive Computer Vision and Robotics (ACVR) 2017 in conjunction with the International Conference on Computer Vision (ICCV) 2017

2016

ACVR 2016

Program Committee Member of the 4^{th} International Workshop on Assistive Computer Vision and Robotics (ACVR) 2016 in conjunction with the International Conference on Computer Vision (ICCV) 2016

2015

ACVR 2015

Program Committee Member of the 3^{rd} International Workshop on Assistive Computer Vision and Robotics (ACVR) 2015 in conjunction with the International Conference on Computer Vision (ICCV) 2015

REVISORE PER RIVISTE INTERNAZIONALI

- IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI) (2021)
- International Journal of Computer Vision (IJCV) (2020)
- IEEE Transactions on Circuits and Systems for Video Technology (2017, 2018, 2019, 2020)

- Computer Vision and Image Understanding (CVIU) (2015, 2016, 2017, 2018, 2019, 2020)
- Pattern Recognition Letters (PRL) (2018, 2019, 2019, 2020)
- Signal Processing Letters (PRL) (2020)
- IEEE Transactions on Image Processing (2020)
- IEEE Transactions on Multimedia (2017, 2020)
- Pattern Recognition (PR) (2017, 2018, 2019)
- IEEE Transactions on artificial intelligence (TAI) (2020)
- IEEE Journal of Biomedical and Health Informatics (2018,2019)
- IET Image Processing (2017, 2018)
- IET Computer Vision (2016, 2019)
- Journal on Electronic Imaging (JEI) (2015, 2016, 2017, 2018, 2019)
- Applied Sciences (2018, 2019)
- Sensors (2018, 2019)
- Information Processing in Agriculture (2019)
- Computers in Industry (2017, 2018)
- Multimedia Tools and Applications (2018)
- Machine Vision and Applications (2018, 2020)
- Remote Sensing (2018)
- Journal of Robotics and Mechatronics (2018)
- ISPRS International Journal of Geo-Information (2018)
- ACM Transactions on Multimedia Computing, Communications and Applications (TOMM) (2017)
- ACM Journal on Computing and Cultural Heritage (JOCCH) (2016, 2017)
- Pattern Analysis and Applications (PAA) (2016)
- Expert Systems With Applications (ESWA) (2016, 2020)
- IEEE Intelligent Transportation Systems Magazine (2016)
- Journal of Traffic and Transportation Engineering (2020)

REVISORE PER CONFERENZE INTERNAZIONALI

- International Conference on Computer Vision and Pattern Recognition (CVPR) (2020, 2021)
- European Conference on Computer Vision (ECCV) (2020)
- Asian Conference on Computer Vision (ACCV) (2020)
- IEEE Winter Conference on Applications of Computer Vision (WACV) (2018, 2019, 2020)
- ACM Multimedia (ACMMM) (2017, 2018, 2019, 2020)
- Advanced Video and Signal based Surveillance (AVSS) (2017, 2019)
- International Conference on Image Analysis and Processing (ICIAP) (2015, 2017, 2019)
- International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISAPP) (2017, 2018, 2019)
- IEEE International Conference on Robotics and Automotion (ICRA) (2018)
- International Conference on Pattern Recognition (ICPR) (2018, 2020)
- Iberoamerican Congress on Pattern Recognition (CIARP) (2018)
- International Joint Conference on Artificial Intelligence and European Conference on Artificial Intelligence (IJCAI – ECAI) (2016, 2018, 2020)
- International Conference on Computer Vision (ICCV) (2017)

REVISORE PER WORKSHOP INTERNAZIONALI

- International Workshop on Video Question Answering and Image Question Answering (VIQA) (2020)
- Workshop on Applications of Egocentric Vision (EgoApp) (2020)
- Workshop on Smart Personal Health Interfaces (SmartPhil) (2020)
- Vision for Interaction and Behaviour understanding (VIBE) (2018)
- Workshop on Egocentric Perception, Interaction and Computing (EPIC) (2017)
- International Workshop on Multimedia Assisted Dietary Management (MADiMa) (2016)
- Workshop on Assistive Computer Vision and Robotics (ACVR) (2015, 2016, 2017, 2018,, 2019)

PRESENTAZIONE ORALE DI ARTICOLI A CONFERENZE O WORKSHOP INTERNAZIONALI

31/10/19 | **WHAT WOULD YOU EXPECT? ANTICIPATING EGOCENTRIC ACTIONS WITH ROLLING-UNROLLING LSTMS AND MODALITY ATTENTION**
International Conference on Computer Vision (ICCV), 2019

17/06/19 | **WHAT WOULD YOU EXPECT? ANTICIPATING EGOCENTRIC ACTIONS WITH ROLLING-UNROLLING LSTMS AND MODALITY ATTENTION**
Fourth international workshop on Egocentric Perception, Interaction and Computing (EPIC) in conjunction with International Conference on Computer Vision and Pattern Recognition (CVPR), 2019.

18/03/19 | **SISTEMI DI VISIONE ARTIFICIALE INDOSSABILI**
Ital-IA - Convegno Nazionale CINI sull'Intelligenza Artificiale, 2019.

27/02/19 | **VISITORS LOCALIZATION IN NATURAL SITES EXPLOITING EGOVISION AND GPS**
International Conference on Computer Vision Theory and Applications (VISAPP), 2019.

09/09/18 | **LEVERAGING UNCERTAINTY TO RETHINK LOSS FUNCTIONS AND EVALUATION MEASURES FOR EGOCENTRIC ACTION ANTICIPATION**
Third international workshop on Egocentric Perception, Interaction and Computing (EPIC) in conjunction with European Conference on Computer Vision (ECCV), 2018.

29/10/17 | **HOW SHALL WE EVALUATE EGOCENTRIC ACTION RECOGNITION?**
Second international workshop on Egocentric Perception, Interaction and Computing (EPIC) in conjunction with International Conference on Computer Vision (ICCV), 2017.

06/06/17 | **ON THE EXPLOITATION OF HIDDEN MARKOV MODELS TO IMPROVE LOCATION-BASED TEMPORAL SEGMENTATION OF EGOCENTRIC VIDEOS**
WearMMe workshop in conjunction with the International Conference on Multimedia Retrieval (ICMR) 2017

09/10/16 | **TEMPORAL SEGMENTATION OF EGOCENTRIC VIDEOS TO HIGHLIGHT PERSONAL LOCATIONS OF INTEREST**
First international workshop on Egocentric Perception, Interaction and Computing (EPIC) in conjunction with European Conference on Computer Vision (ECCV), 2016

12/12/15 | **RECOGNIZING PERSONAL CONTEXTS FROM EGOCENTRIC IMAGES**
Third workshop on Assistive Computer Vision and Robotics (ACVR) in conjunction with the International Conference on Computer Vision (ICCV), 2015

30/09/15 | **GENERALIZED SOBEL FILTERS FOR GRADIENT ESTIMATION OF FISH-EYE IMAGES**
International Conference on Image Processing (ICIP), 2015

09/06/14 | **A CUSTOMIZED SYSTEM FOR VEHICLE TRACKING AND CLASSIFICATION**
European Conference on Mathematics for Industry (ECMI), 2014

PRESENTAZIONE DI POSTER A CONFERENZE, WORKSHOP E SCUOLE INTERNAZIONALI

15/01/21 | **UNSUPERVISED DOMAIN ADAPTATION FOR OBJECT DETECTION IN CULTURAL SITES**
International Conference on Pattern Recognition (ICPR), 2021

13/01/21 | **SEMANTIC OBJECT SEGMENTATION IN CULTURAL SITES USING REAL AND SYNTHETIC DATA**
International Conference on Pattern Recognition (ICPR), 2021

31/10/19 | **WHAT WOULD YOU EXPECT? ANTICIPATING EGOCENTRIC ACTIONS WITH ROLLING-UNROLLING LSTMS AND MODALITY ATTENTION**
International Conference on Computer Vision (ICCV), 2019

25/09/19 | **EGOCENTRIC ACTION ANTICIPATION BY DISENTANGLING ENCODING AND INFERENCE**
International Conference on Image Processing(ICIP), 2019

09/07/19 | **WHAT WOULD YOU EXPECT? ANTICIPATING EGOCENTRIC ACTIONS WITH ROLLING-UNROLLING LSTMS AND MODALITY ATTENTION**
Student Poster Session at the International Computer Vision Summer School (ICVSS), 2019

17/06/19 | **WHAT WOULD YOU EXPECT? ANTICIPATING EGOCENTRIC ACTIONS WITH ROLLING-UNROLLING LSTMS AND MODALITY ATTENTION**
Fourth international workshop on Egocentric Perception, Interaction and Computing (EPIC) in conjunction with International Conference on Computer Vision and Pattern Recognition (CVPR), 2019.

11/09/18 | **SCALING EGOCENTRIC VISION: THE EPIC-KITCHENS DATASET**
European Conference on Computer Vision (ECCV), 2018

09/09/18 | **LEVERAGING UNCERTAINTY TO RETHINK LOSS FUNCTIONS AND EVALUATION MEASURES FOR EGOCENTRIC ACTION ANTICIPATION**
Third international workshop on Egocentric Perception, Interaction and Computing (EPIC) in conjunction with European Conference on Computer Vision (ECCV), 2018.

30/05/18 | **SCALING EGOCENTRIC VISION: THE EPIC-KITCHENS DATASET**
International Workshop on Computer Vision (IWCV), 2018

09/07/18 | **SCALING EGOCENTRIC VISION: THE EPIC-KITCHNES DATASET**
Student Poster Session at the International Computer Vision Summer School (ICVSS), 2018

29/10/17 | **HOW SHALL WE EVALUATE EGOCENTRIC ACTION RECOGNITION?**
Second international workshop on Egocentric Perception, Interaction and Computing (EPIC) in conjunction with International Conference on Computer Vision (ICCV), 2017.

16/10/17 | **FOOD VS NON-FOOD CLASSIFICATION**
Second international workshop on Multimedia Assisted Dietary Management (MADiMa) in conjunction with ACM Multimedia (ACMMM), 2016

10/07/17 | **HOW SHALL WE EVALUATE EGOCENTRIC ACTION RECOGNITION?**
Student Poster Session at the International Computer Vision Summer School (ICVSS), 2017

09/10/16 | **TEMPORAL SEGMENTATION OF EGOCENTRIC VIDEOS TO HIGHLIGHT PERSONAL LOCATIONS OF INTEREST**
First international workshop on Egocentric Perception, Interaction and Computing (EPIC) in conjunction with European Conference on Computer Vision (ECCV), 2016

19/07/16 | **NEXT-ACTIVE-OBJECT PREDICTION FROM EGOCENTRIC VIDEOS**
Student Poster Session at the International Computer Vision Summer School (ICVSS), 2016

18/07/16 | **SEGMENTING EGOCENTRIC VIDEOS TO HIGHLIGHT PERSONAL LOCATIONS OF INTEREST**
Student Poster Session at the International Computer Vision Summer School (ICVSS), 2016

01/07/16 | **SEGMENTING EGOCENTRIC VIDEOS TO HIGHLIGHT PERSONAL LOCATIONS OF INTEREST**
Fourth workshop on Egocentric (First-Person) Vision in conjunction with International Conference on Computer Vision and Pattern Recognition (CVPR), 2016.

12/12/15 | **RECOGNIZING PERSONAL CONTEXTS FROM EGOCENTRIC IMAGES**
Third workshop on Assistive Computer Vision and Robotics (ACVR) in conjunction with the International Conference on Computer Vision (ICCV), 2015

13/07/15 | **GENERALIZED SOBEL FILTERS FOR GRADIENT ESTIMATION OF FISHEYE IMAGES**
Student Poster Session at the International Computer Vision Summer School (ICVSS), 2015

12/09/14 | **AN EXPERIMENTAL ANALYSIS OF SALIENCY DETECTION WITH RESPECT TO THREE SALIENCY LEVELS**
Second workshop on Assistive Computer Vision and Robotics (ACVR) in conjunction with the European Conference on Computer Vision (ECCV), 2014

15/07/14 | **AN EXPERIMENTAL ANALYSIS OF SALIENCY DETECTION WITH RESPECT TO THREE SALIENCY LEVELS**
Student Poster Session at the International Computer Vision Summer School (ICVSS), 2014

14/07/14 | **A CUSTOMIZED SYSTEM FOR VEHICLE TRACKING AND CLASSIFICATION**
Student Poster Session at the International Computer Vision Summer School (ICVSS), 2014

PARTECIPAZIONE A PROGETTI DI RICERCA

Ricercatore Principale

MAR 2020 – FEB 2023 | **PREDIZIONE DI AZIONI E INTERAZIONI CON OGGETTI DA IMMAGINI E VIDEO ACQUISITI MEDIANTE TELECAMERE INDOSSABILI**

Granted by: AIM – Attraction and International Mobility. Codice Proposta AIM1893589
Principal Investigator (Ricercatore RTD-A): Dr. Antonino Furnari.

Coordinamento

MAR 2020 – FEB 2023 **ENIGMA: EGOCENTRIC NAVIGATOR FOR INDUSTRIAL GUIDANCE, MONITORING AND ANTICIPATION.**
Granted by: MISE - Fondo per la Crescita Sostenibile – Sportello "Fabbrica intelligente" PON I&C 2014-2020 (Prog n. F/190050/02/X44 – CUP: B61B19000520008 COR: 1631498).
Partners: XENIA Progetti s.r.l., University of Catania, Morpheos s.r.l.
Principal Investigator: Prof. Giovanni Maria Farinella.
Coordination of the research unit at University of Catania: Dr. Antonino Furnari.

FEB 2020 – DEC 2023 **EVA - EGOCENTRIC VISION WITH ADAPTATION: STUDIO DI ALGORITMI DI DOMAIN ADAPTATION NEL CONTESTO FIRST PERSON (EGOCENTRIC) VISION**
Granted by: Xenia Network Solutions s.r.l.
Principal Investigator: Prof. Giovanni Maria Farinella.
Coordination of the research unit at University of Catania: Dr. Antonino Furnari.

FEB. 2019 – DEC. 2019 **VIPS - VISUAL INDOOR POSITIONING: SYSTEM - STUDIO E DESIGN DI ALGORITMI PER LA LOCALIZZAZIONE A PARTIRE DA SEQUENZE DI IMMAGINI ACQUISITE CON DISPOSITIVI DI FIRST PERSON (EGOCENTRIC) VISION**
Granted by: Grant by: Xenia Network Solutions.
Principal Investigator: Dr. Giovanni Maria Farinella.
Coordination of the research unit at University of Catania: Dr. Antonino Furnari.

JUNE 2018 – DEC. 2018 **MAN-FPV - STUDIO E DESIGN DI ALGORITMI DI COMPUTER VISION E MACHINE LEARNING PER ANTICIPAZIONE DELLE AZIONI E DELLE INTERAZIONI FRA UTENTE E OGGETTI.**
Granted by: Grant by: Xenia Network Solutions.
Principal Investigator: Dr. Giovanni Maria Farinella.
Coordination of the research unit at University of Catania: Dr. Antonino Furnari.

Partecipazione

JAN 2020 – JUNE 2022 **VALUE - VISUAL ANALYSIS FOR LOCALIZATION AND UNDERSTANDING OF ENVIRONMENTS.**
Granted by: PO FESR 2014/2020 - Azione 1.1.5 (N. 08CT6209090207 - CUP G69J18001060007).
Partners: University of Catania (CUTGANA), Xenia Gestione Documentale srl, IMC Service, Capitale Cultura, CNR.
Principal Investigators: Prof. Giovanni Maria Farinella, Prof. Giovanni Signorello.
Participant: Dr. Antonino Furnari.

JAN 2020 – DEC 2022 **PHILHUMANS - PERSONAL HEALTH INTERFACES LEVERAGING HUMAN-MACHINE NATURAL INTERACTIONS.**
Granted by: Marie Sklodowska Curie - Horizon 2020-ITN-EID.
Partners: Philips, TU/e, University of Cagliari, University of Catania, University of Aberdeen, R2M Solution.
Principal Investigator: Prof. Giovanni Maria Farinella.
Participant: Dr. Antonino Furnari.

JULY 2020 – JUNE 2022 | **MEGABIT - MONITORING EGOCENTRIC GAZE FOR ANALYSIS OF BEHAVIORS AND INTERACTIONS WITH TARGETS.**

Granted by: Piano di incentivi per la ricerca di Ateneo 2020/2022 (Pia.ce.ri.) – linea di intervento 2, Dipartimento di Matematica e Informatica, Università degli studi di Catania.

Principal Investigators: Prof. Giovanni Maria Farinella, Maria De Salvo.

Participant: Dr. Antonino Furnari.

JAN 2018 – DEC 2019 | **FIRST PERSON (EGOCENTRIC) VISION FOR SCENE UNDERSTANDING.**

Granted by: Piano della Ricerca 2016-2018 – linea di intervento 2.

Principal Investigators: Prof. Giovanni Maria Farinella, Maria De Salvo.

Participant: Dr. Antonino Furnari.

JAN 2017 – DEC 2018 | **VEDI: VIDEO EXPLOITATION FOR DATA INTERPRETATION (2017-2018).**

Granted by: PON MISE Horizon 2020 (Prog. n. F/050457/02/X32, CUP: B68I17000800008, COR: 128032).

Partners: University of Catania (CUTGANA), Xenia Gestione Documentale srl, IMC Service.

Principal Investigators: Prof. Giovanni Maria Farinella, Prof. Giovanni Signorello.

Participant: Dr. Antonino Furnari.

APR 2014 – DEC 2015 | **PANORAMA - ULTRAWIDE CONTEXT AWARE IMAGING (ENIAC)**

Among the partners of the project: Dipartimento di Matematica ed Informatica, STMicroelectronics, Philips, Bosch, Cmosis

Local Scientific Coordinator: Prof. Sebastiano Battiato

Participant: Dr. Antonino Furnari.

CONSULENZE SCIENTIFICHE

GEN. 2020 – FEB 2020 | **ALGORITMI DI INTELLIGENZA ARTIFICIALE PER DISPOSITIVI EGOCENTRICI**

Consulenza scientifica per l'associazione Image Processing Laboratory (IPLAB), Catania (IT)

APR. 2019 – MAY 2019 | **VISUAL LOCALIZATION FROM FIRST PERSON VISION**

Consulenza scientifica per l'associazione Image Processing Laboratory (IPLAB), Catania (IT)

MAR. 2017 – MAY 2018 | **PREDICTIVE ALGORITHMS FOR COMPUTER VISION**

Consulenza scientifica per l'associazione Image Processing Laboratory (IPLAB), Catania (IT)

MAY 2017 – SEPT. 2017 | **RESEARCH AND DEVELOPMENT OF COMPTUER VISION ALGORITHMS FOR FIRST PERSON VISION**

Consulenza scientifica per l'associazione Image Processing Laboratory (IPLAB), Catania (IT)

JAN. 2017 – FEB. 2017 | **RESEARCH AND DEVELOPMENT OF COMPUTER VISION ALGORITHMS FOR TEMPORAL SEGMENTATION OF EGOCENTRIC VIDEOS**

Consulenza scientifica per l'associazione Image Processing Laboratory (IPLAB), Catania (IT)

2014-2015 | **ANALYSIS OF SAR IMAGES ACQUIRED FROM THE MT. ETNA**

Collaboration with INGV-CT, Catania (IT)

2013-2018 | **COMPUTER VISION ALGORITHMS FOR FISH-EYE CAMERAS**

Collaboration with STMicroelectronics

MAR. 2013 – MAY 2013 | **EVALUATION, IMPLEMENTATION OF VISUAL TRACKING ALGORITHMS IN THE ICT DOMAIN USING REAL-DATA**
Contratto di ricerca presso il Consorzio Catania Ricerche, Catania (IT) on the Project Digintegra PO/FESR Misura 4.1.1.1

PARTECIPAZIONI A SCUOLE ESTIVE

7/07/19 – 13/07/19 | **INTERNATIONAL COMPUTER VISION SUMMER SCHOOL (ICVSS) 2019**
Ragusa (IT)
Topic: Computer Vision - Where are we?

29/07/18 – 04/08/18 | **MEDICAL IMAGING SUMMER SCHOOL (MISS) 2018**
Favignana (IT)
Topic: Medical Imaging meets Deep Learning

08/07/18 – 14/07/18 | **INTERNATIONAL COMPUTER VISION SUMMER SCHOOL (ICVSS) 2018**
Ragusa (IT)
Topic: Computer Vision after Deep Learning

09/07/17 – 15/07/17 | **INTERNATIONAL COMPUTER VISION SUMMER SCHOOL (ICVSS) 2017**
Ragusa (IT)
Topic: From Representation to Action and Interaction

31/07/16 – 06/08/16 | **MEDICAL IMAGING SUMMER SCHOOL (MISS) 2016**
Favignana (IT)
Topic: Medical Imaging meets Machine Learning

13/07/16 – 19/07/16 | **INTERNATIONAL COMPUTER VISION SUMMER SCHOOL (ICVSS) 2016**
Ragusa (IT)
Topic: What Happens next?

12/07/15 – 18/07/15 | **INTERNATIONAL COMPUTER VISION SUMMER SCHOOL (ICVSS) 2015**
Ragusa (IT)
Topic: Learning to See

28/07/14 – 01/08/14 | **MEDICAL IMAGING SUMMER SCHOOL (MISS) 2014**
Favignana (IT)
Topic: Medical Imaging meets Computer Vision

13/07/14 – 19/07/14 | **INTERNATIONAL COMPUTER VISION SUMMER SCHOOL (ICVSS) 2014**
Ragusa (IT)
Topic: From Fundamentals to Applications

16/06/14 – 20/06/14 | **VISIONE DELLE MACCHINE (VISMAC) 2014**
Salerno (IT)
Topic: Computer Vision and Pattern Recognition for Homeland Security

14/07/13 – 20/07/13 | **INTERNATIONAL COMPUTER VISION SUMMER SCHOOL (ICVSS) 2013**
Ragusa (IT)
Topic: Computer Vision and Machine Learning

PARTECIPAZIONE A CONFERENZE E WORKSHOP

10/01/21	**INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION (ICPR) 2020**
15/01/21	*Milano (IT), Held online because of Covid-19*
05/01/21	**WINTER APPLICATIONS OF COMPUTER VISION (WACV) 2021**
09/01/21	*Held online because of Covid-19*
23/08/20	**EUROPEAN CONFERENCE ON COMPUTER VISION (ECCV) 2020**
18/08/20	*Glasgow (UK) - held online because of Covid-19*
14/06/20	**INTERNATIONAL CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR) 2020**
19/06/20	*Seattle (US) - held online because of Covid-19*
27/02/20	**INTERNATIONAL CONFERENCE ON COMPUTER VISION THEORY AND APPLICATIONS (VISAPP) 2020**
29/02/20	*Malta (MT)*
27/10/19	**INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV) 2019**
02/11/19	*Seoul (KR)*
22/09/19	**INTERNATIONAL CONFERENCE ON IMAGE PROCESSING (ICIP) 2019**
25/09/19	*Taipei (TW)*
12/09/19	**BRITISH MACHINE VISION CONFERENCE (BMVC) 2019**
	CARDIFF (UK)
15/06/19	**INTERNATIONAL CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR) 2019**
20/06/19	*Long Beach (US)*
25/02/19	**INTERNATIONAL CONFERENCE ON COMPUTER VISION THEORY AND APPLICATIONS (VISAPP) 2019**
27/02/19	*Prague (CZ)*
08/09/18	**EUROPEAN CONFERENCE ON COMPUTER VISION (ECCV) 2018**
14/09/18	*Munich (DE)*
26/05/18	**INTERNATIONAL WORKSHOP ON COMPUTER VISION (IWCV) 2018**
28/05/18	*Modena (IT)*
22/10/17	**INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV) 2017**
29/10/17	*Venice (IT)*
06/06/17	**INTERNATIONAL CONFERENCE ON MULTIMEDIA RETRIEVAL (ICMR) 2017**
09/06/17	*Bucharest (RO)*
08/10/16	**EUROPEAN CONFERENCE ON COMPUTER VISION (ECCV) 2016**
16/10/16	*Amsterdam (NL)*

06/10/16 – 07/10/16 | **WORKSHOP ON VARIATIONAL INEQUALITIES, NASH EQUILIBRIUM PROBLEMS AND APPLICATIONS (VINEPA) 2016**
Catania (IT)

26/06/16 – 01/07/16 | **INTERNATIONAL CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR) 2016**
Las Vegas (US)

11/12/15 – 18/12/15 | **INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV) 2015**
Santiago (CL)

25/10/15 – 29/10/15 | **ADVANCED CONCEPTS FOR INTELLIGENT VISION SYSTEMS (ACIVS) 2015**
Catania (IT)

27/09/15 – 30/09/15 | **INTERNATIONAL CONFERENCE ON IMAGE PROCESSING (IPIC) 2015**
Quebec City (CA)

06/09/14 – 12/09/14 | **EUROPEAN CONFERENCE ON COMPUTER VISION (ECCV) 2014**
Zurich (CH)

09/06/14 – 13/06/14 | **EUROPEAN CONFERENCE ON MATHEMATICS FOR INDUSTRY (ECMI) 2014**
Taormina (IT)

04/05/14 – 09/05/14 | **INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING (ICASSP) 2014**
Florence (IT)

DIDATTICA

CORSI UNIVERSITARI

A.A. 20/21 | **SOCIAL MEDIA MANAGEMENT**
Dept. of Mathematics and Computer Science, University of Catania (IT)
BSc course in Computer Science — 48 hours — 6 CFU

STATISTICAL LABORATORY
Dept. of Economics and Business, University of Catania (IT)
MSc course in Data Science for Management — 36 hours — 3 CFU

A.A. 19/20 | **SOCIAL MEDIA MANAGEMENT**
Dept. of Mathematics and Computer Science, University of Catania (IT)
BSc course in Computer Science — 48 hours — 6 CFU

A.A. 18/19 | **LABORATORIO DI FONDAMENTI DI ANALISI DEI DATI**
Dept. of Mathematics and Computer Science, University of Catania (IT)
MSc course in Computer Science — 24 hours — 3 CFU

A.A. 17/18 | **LABORATORIO DI FONDAMENTI DI ANALISI DEI DATI**
Dept. of Mathematics and Computer Science, University of Catania (IT)
MSc course in Computer Science — 24 hours — 3 CFU

CORSI DI DOTTORATO

A.A. 20/21 | **READING GROUP**
Coordination of the Reading Group at the PhD Course of the Department of Mathematics and Computer Science at the University of Catania - XXXVI Ciclo
PhD Course — 24 hours

A.A. 19/20 | **READING GROUP**
Coordination of the Reading Group at the PhD Course of the Department of Mathematics and Computer Science at the University of Catania - XXXV Ciclo
PhD Course — 24 hours

A.A. 18/19 | **READING GROUP**
Coordination of the Reading Group at the PhD Course of the Department of Mathematics and Computer Science at the University of Catania - XXXIV Ciclo
PhD Course — 24 hours

A.A. 17/18 | **READING GROUP**
Coordination of the Reading Group at the PhD Course of the Department of Mathematics and Computer Science at the University of Catania - XXXIII Ciclo
PhD Course — 24 hours

ASSISTENZA A CORSI UNIVERSITARI

A.A. 19/20 | **LABORATORIES FOR THE "MACHINE LEARNING" COURSE**
Dept. of Mathematics and Computer Science, University of Catania (IT)
Laboratories for the MSc course in Computer Science "Machine Learning" — 12 hours
Teacher of the Course: Giovanni Maria Farinella
Topics of the Laboratories: Introduction to Python, Introduction to PyTorch, Linear Regression, Logistic Regression, Softmax Regression, Stochastic Gradient Descent, Loading data with PyTorch, Multilayer Perceptron, Deep Multilayer Perceptron, REC curves, Convolutional Neural Networks, Transfer Learning, Metric Learning, Triplet Networks, Siamese Networks, LSTMs.

A.A. 18/19 | **LABORATORIES FOR THE "MACHINE LEARNING" COURSE**
Dept. of Mathematics and Computer Science, University of Catania (IT)
Laboratories for the MSc course in Computer Science "Machine Learning" — 12 hours
Teacher of the Course: Giovanni Maria Farinella
Topics of the Laboratories: Introduction to Python, Introduction to PyTorch, Linear Regression, Logistic Regression, Softmax Regression, Stochastic Gradient Descent, Loading data with PyTorch, Multilayer Perceptron, Deep Multilayer Perceptron, REC curves, Convolutional Neural Networks, Transfer Learning, Metric Learning, Triplet Networks, Siamese Networks.

LABORATORIES FOR THE COURSE "UNDERSTANDING THE WORLD OF DEEP LEARNING: THEORY, APPLICATIONS AND PRACTICE"
Scuola Superiore di Catania, University of Catania (IT)
Laboratories — 4 hours
Teacher of the Course: Giovanni Maria Farinella
Topics of the Laboratories: Introduction to Python, Introduction to PyTorch, Linear Regression, Logistic Regression, Multilayer Perceptron, Convolutional Neural Networks

A.A. 17/18

LABORATORIES FOR THE "MACHINE LEARNING" COURSE

Dept. of Mathematics and Computer Science, University of Catania (IT)

Laboratories for the MSc course in Computer Science "Machine Learning" — 12 hours

Teacher of the Course: Giovanni Maria Farinella

Topics of the Laboratories: Introduction to Python, Introduction to PyTorch, Linear Regression, Logistic Regression, Softmax Regression, Stochastic Gradient Descent, Loading data with PyTorch, Multilayer Perceptron, Deep Multilayer Perceptron, REC curves, Convolutional Neural Networks.

LABORATORIES AND SEMINARS FOR THE "COMPUTER VISION" COURSE

Dept. of Mathematics and Computer Science, University of Catania (IT)

Laboratories and seminars for the MSc course in Computer Science "Computer Vision" — 6 hours

Teacher of the Course: Sebastiano Battiato

Topics of the Laboratories: Introduction to Python and OpenCV, Laboratories on Stereoscopic Vision and Extraction and Matching of local features.

LABORATORIES FOR THE "SOCIAL MEDIA MANAGEMENT" COURSE

Dept. of Mathematics and Computer Science, University of Catania (IT)

Laboratories for the BSc course in Computer Science "Social Media Management" — 8 hours

Teacher of the Course: Giovanni Maria Farinella

Topics of the Laboratories: Handling Datasets of Images with Python, Bag of Words Model, Linear Regression, Classification (KNN, Naive Bayes, Logistic Regression).

LABORATORIES AND SEMINARS FOR THE "COMPUTER VISION" COURSE

Dept. of Mathematics and Computer Science, University of Catania (IT)

Laboratories and seminars for the MSc course in Computer Science "Computer Vision" — 8 hours

Teacher of the Course: Sebastiano Battiato

Topics of the Laboratories and Seminars: Introduction to Python and OpenCV, Laboratories on Stereoscopic Vision and Extraction and Matching of local features. Seminar on Deep Learning.

A.A. 16/17

LABORATORIES FOR THE "SOCIAL MEDIA MANAGEMENT" COURSE

Dept. of Mathematics and Computer Science, University of Catania (IT)

Laboratories for the BSc course in Computer Science "Social Media Management" — 8 hours

Teacher of the Course: Giovanni Maria Farinella

Topics of the Laboratories: Handling Datasets of Images with Python, Bag of Words Model, Linear Regression, Classification (KNN, Naive Bayes, Logistic Regression), Introduction to Tensorflow.

A.A. 15/16

LABORATORIES FOR THE "SOCIAL MEDIA MANAGEMENT" COURSE

Dept. of Mathematics and Computer Science, University of Catania (IT)

Laboratories for the BSc course in Computer Science "Social Media Management" — 8 hours

Teacher of the Course: Giovanni Maria Farinella

Topics of the Laboratories: Bag of Words Model, Linear Regression, Classification (KNN, Naive Bayes, Logistic Regression).

A.A. 14/15

SEMINARS FOR THE "SOCIAL MEDIA MANAGEMENT" COURSE

Dept. of Mathematics and Computer Science, University of Catania (IT)

Laboratories for the BSc course in Computer Science "Social Media Management" — 4 hours

Teacher of the Course: Giovanni Maria Farinella

Topics of the Seminars: What Makes an Image Memorable? What Makes an Image Popular?

LABORATORIES AND SEMINARS FOR THE "COMPUTER VISION" COURSE

Dept. of Mathematics and Computer Science, University of Catania (IT)
Laboratories and seminars for the MSc course in Computer Science "Computer Vision" — 21 hours
Teacher of the Course: Sebastiano Battiato
Topics of the Laboratories and Seminars: Seminars on Image Formation, Camera Calibration, Augmented Reality and Visual Tracking. Laboratories on Local Feature Extraction and Local Feature Matching.

A.A. 13/14 **SEMINARS FOR THE "COMPUTER VISION" COURSE**
Dept. of Mathematics and Computer Science, University of Catania (IT)
Seminars for the MSc course in Computer Science "Computer Vision" — 15 hours
Teacher of the Course: Sebastiano Battiato
Topics of the Seminars: Image Formation, Camera Calibration, Augmented Reality, Introduction to VLFeat, Visual Tracking.

A.A. 12/13 **SEMINAR FOR THE "COMPUTER VISION" COURSE**
Dept. of Mathematics and Computer Science, University of Catania (IT)
Seminar for the MSc course in Computer Science "Computer Vision" — 3 hours
Teacher of the Course: Giovanni Maria Farinella
Topic of the Seminar: Visual Tracking.

ALTRI CORSI

A.A. 16/17 **TUTORING FOR THE COMPUTER PROGRAMMING I AND II COURSES**
Dept. of Mathematics and Computer Science, University of Catania (IT)
Tutoring for BSc courses in Computer Science — 80 hours

A.F. 15/16 **WEB APPLICATIONS 2**
ITS Steve Jobs institute, Caltagirone (IT)
Course for the ITS Steve Jobs institute — 75 hours

SUPERVISIONE DI STUDENTI

SUPERVISIONE DI STUDENTI DI DOTTORATO

- Dott. Giovanni Pasqualino, XXXVI Ciclo. Supervisors: Prof. Giovanni Maria Farinella, Dott. Antonino Furnari;
- Dott. Rosario Leonardi, XXXVI Ciclo. Supervisors: Prof. Giovanni Maria Farinella, Dott. Antonino Furnari;
- Dott. Camillo Quattrocchi, XXXVI Ciclo. Supervisors: Prof. Giovanni Maria Farinella, Dott. Antonino Furnari;

CO-SUPERVISIONE DI STUDENTI DI DOTTORATO

- Dott. Santi Orlando, XXXIII Ciclo, Ph.D. Scholarship Granted by DWord. Supervisor: Prof. Giovanni Maria Farinella. Co-Supervisor: Antonino Furnari;
- Dott. Francesco Ragusa, XXXIII Ciclo. Supervisor: Prof. Giovanni Maria Farinella. Co-Supervisor: Antonino Furnari;
- Dott. Marco Rosano, XXXIV Ciclo, Ph.D. Scholarship Granted by OrangeDev. Supervisor: Prof. Giovanni Maria Farinella. Co-Supervisor: Antonino Furnari;
- Dott. Giuseppe Puglisi, XXXIV Ciclo. Supervisor: Prof. Giovanni Maria Farinella. Co-Supervisor: Antonino Furnari;

- Dott. Ivan Rodin, Ph.D. Scholarship Granted by Marie Sklodowska Curie - Horizon 2020-ITN-EID. Supervisor: Prof. Giovanni Maria Farinella. Co-Supervisors: Antonino Furnari;
- Dott.ssa Ronja Möller, Ph.D. Scholarship Granted by Marie Sklodowska Curie - Horizon 2020-ITN-EID. Co-Supervisors: Prof. S. Battiato, Antonino Furnari;

SUPERVISIONE DI TESI DI LAUREA

A.A. 20/21

ANTICIPARE OGGETTI ATTIVI DA VIDEO IN PRIMA PERSONA NEI LUOGHI DI LAVORO INDUSTRIALI
Candidate: Rosario Scavo — *Supervisor*: Dr. Antonino Furnari.
Tesi non ancora conclusa

ALGORITMI DI ALLINEAMENTO TEMPORALE DI FLUSSI VIDEO DA PRIMA E TERZA PERSONA
Candidate: Martina Milazzo — *Supervisor*: Dr. Antonino Furnari.
Tesi non ancora conclusa

A.A. 19/20

BENEDETTINI TOUR BOT: BOT PER ASSISTERE I VISITATORI DI UN SITO CULTURALE E FORNIRE RACCOMANDAZIONI SULLE OPERE D'ARTE
Candidate: Claudia Bonanno — *Supervisor*: Dr. Antonino Furnari.

ALGORITMO PER IL RILEVAMENTO DI MANI CON E SENZA GUANTI MEDIANTE MEDIAPIPE
Candidate: Diego Rando — *Supervisor*: Dr. Antonino Furnari.

SISTEMA DI RACCOMANDAZIONE PER OPERE D'ARTE MEDIANTE DISPOSITIVI INDOSSABILI
Candidate: Biagio Incardona — *Supervisor*: Dr. Antonino Furnari. *Co-Supervisor:* Prof. Giovanni Maria Farinella

TECNICHE DI DATA AUGMENTATION PER IL RICONOSCIMENTO DI OGGETTI IN CONTESTI INDUSTRIALI
Candidate: Stefano D'Arrigo — *Supervisor*: Dr. Antonino Furnari. *Co-Supervisor:* Prof. Giovanni Maria Farinella

CO-SUPERVISIONE DI TESI DI LAUREA

A.A. 19/20

SVILUPPO DI ALGORITMI PER LA STIMA DELLO SGUARDO MEDIANTE MICROSOFT HOLOLENS 2
Candidate: Michele Mazzamuto — *Supervisor*: Prof. Giovanni Maria Farinella *Co-Supervisor:* Dr. Antonino Furnari

SVILUPPO DI ALGORITMI PER LA LOCALIZZAZIONE MEDIANTE MICROSOFT HOLOLENS2
Candidate: Santino Isgrò — *Supervisor*: Prof. Giovanni Maria Farinella *Co-Supervisor:* Dr. Antonino Furnari

UNSUPERVISED DOMAIN ADAPTATION PER OBJECT DETECTIONIN SITI CULTURALI
Candidate: Giovanni Pasqualino — *Supervisor*: Prof. Giovanni Maria Farinella *Co-Supervisor:* Dr. Antonino Furnari

CONTEXT AWARE FEW-SHOT RECOGNITION OF POINTS OF INTEREST IN CULTURAL SITES

Candidate: Daniele Calanna — *Supervisor*: Prof. Giovanni Maria Farinella *Co-Supervisor:* Dr. Antonino Furnari

FEW-SHOT POINTS OF INTEREST RECOGNITIONIN CULTURAL SITES

Candidate: Riccardo Torrisi — *Supervisor*: Prof. Giovanni Maria Farinella *Co-Supervisor:* Dr. Antonino Furnari

A.A. 18/19 **CONTEXT RECOGNITION FROM FIRST PERSON VISION**

Candidate: Rosario Scalia — *Supervisor*: Dr. Giovanni Maria Farinella *Co-Supervisor:* Dr. Antonino Furnari

A.A. 17/18 **ANALISI E SPERIMENTAZIONE DEL FRAMEWORK VUFORIA PER LO SVILUPPO DI APPLICAZIONI "ROBUSTE" DI AUGMENTED REALITY (AR)**

Candidate: Andrea Ciccotta — *Supervisor*: Prof. Sebastiano Battiato — *Co-Supervisor:* Dr. Antonino Furnari

CLASSIFICAZIONE DI IMMAGINI A 360° PER LA LOCALIZZAZIONE IN AMBIENTI INDOOR

Candidate: Luna Maugeri — *Supervisor*: Dr. Giovanni Maria Farinella — *Co-Supervisor:* Dr. Antonino Furnari

SELEZIONE E NAVIGAZIONE DI VISTE RAPPRESENTATIVE DI LUOGHI DI INTERESSE

Candidate: Alessio Piazza — *Supervisor*: Dr. Giovanni Maria Farinella — *Co-Supervisor:* Dr. Antonino Furnari

RICONOSCIMENTO DI CONTESTI E PUNTI D'INTERESSE IN VIDEO EGOCENTRICI

Candidate: Francesco Ragusa — *Supervisor*: Dr. Giovanni Maria Farinella — *Co-Supervisor:* Dr. Antonino Furnari

A.A. 14/15 **STUDIO E IMPLEMENTAZIONE DI ALGORITMI PER SMILE DETECTION**

Candidate: Rosario Ruta — *Supervisor*: Prof. Sebastiano Battiato — *Co-Supervisors:* Dr. Danila Scandura, Dott. Antonino Furnari

FEATURE BASED ANALYSIS IN THE FISHEYE DOMAIN

Candidate: Michele Bellocchi — *Supervisor*: Prof. Sebastiano Battiato — *Co-Supervisors:* Dr. Arcangelo Ranieri Bruna, Dott. Antonino Furnari

A.A. 13/14 **STUDIO E IMPLEMENTAZIONE DI ALGORITMI PER SMILE DETECTION**

Candidate: Federico Brinch — *Supervisor*: Prof. Sebastiano Battiato — *Co-Supervisors:* Dott. Antonino Furnari

PREMI E RICONOSCIMENTI

2020 **CVPR 2020 - OUSTANDING REVIEWER AWARD**

Recognized as outsanding reviewer at CVPR 2020 - http://cvpr2020.thecvf.com/reviewer-acknowledgements [GII-GRIN-SCIE Class 1, Rating A++, 2018]

2019 **PAPER ACCEPTED AS ORAL AT ICCV 2019 (187 ORALS OVER 4303 SUBMISSIONS, TOP 4.3%)**

Paper "What Would You Expect? Anticipating Egocentric Actions with Rolling-Unrolling LSTMs and Modality Attention" accepted for an oral presentation at ICCV 2019 (top 4.3% of submissions) [GII-GRIN-SCIE Class 1, Rating A++, 2018].

PAPER AWARDED AS TOP 10% OF ICIP 2019

Top 10% Award for the paper "Egocentric Action Anticipation by Disentangling Encoding and Inference" at the ICIP 2019 conference [GII-GRIN-SCIE Class 2, Rating A-, 2018].

2018 **PAPER ACCEPTED AS ORAL AT ECCV 2018 (59 ORALS OVER 2439 SUBMISSIONS, TOP 2.42%)**

Paper "Scaling Egocentric Vision: The EPIC-KITCHENS dataset" accepted for an oral presentation at ECCV 2018 (top 2.42% of submissions) [GII-GRIN-SCIE Class 1, Rating A+, 2018].

TOP REVIEWER FOR CROSS-FIELD

Recognized as "top reviewer for Cross-Field" by PUBLONS

2017 **OUSTANDING CONTIRBUTION IN REVIEWING FOR THE ELSEVIER PATTERN RECOGNITION JOURNAL**

Awarded in recognition of the contributions made to the quality of the journal [Impact Factor 2017: 3.965]

OUSTANDING CONTIRBUTION IN REVIEWING FOR THE ELSEVIER COMPUTER VISION AND IMAGE UNDERSTANDING JOURNAL

Awarded in recognition of the contributions made to the quality of the journal [Impact Factor 2017: 2.391]

2015 **PAPER AWARDED AS TOP 10% OF ICIP 2015**

Top 10% Award for the paper "Generalized Sobel Filters for Gradient Estimation of Distorted Images" at the ICIP 2015 conference [GII-GRIN-SCIE Class 2, Rating A-, 2015].

2014 **PAPER AWARDED AS TOP 10% OF ICIP 2014**

Top 10% Award for the paper "Affine Region Detectors on the Fisheye Domain" at the ICIP 2014 conference [GII-GRIN-SCIE Class 2, Rating A-, 2015].

2013 **READING GROUP COMPETITION - ICVSS 2013 AWARD.**

Winner of the reading group competition at the International Computer Vision Summer School (ICVSS) 2013

PUBBLICAZIONI

TESI

2016 **PHD THESIS: CONTEXT AWARENESS IN FIRST PERSON VISION**

Supervisors: Prof. Sebastiano Battiato and Dr. Giovanni Maria Farinella.

2013 **MASTER THESIS: VEHICLE TRACKING IN REAL-WORLD VIDEO SEQUENCES**

Supervisors: Prof. Sebastiano Battiato and Dr. Giovanni Maria Farinella.

2010 **BACHELOR THESIS: VALUATAZIONI E OTTIMIZZAZIONI DI DESIGN PATTERN AD ASPETTI**

Supervisor: Prof. Emiliano Tramontana.

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filling date: 17/10/2018, Universita' degli Studi di Catania, Xenia Gestione Documentale S.R.L., IMC Service S.R.L. 2018.

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ing and Cultural Heritage (JOCCH) 12.2 (2019), 11:1–11:19. ISSN: 1556-4673. DOI: 10.1145/3276772. URL: http://iplab.dmi.unict.it/VEDI/.

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[45] D. Di Mauro, A. Furnari, G. Patanè, S. Battiato, and G. M. Farinella. "A Comparison of Techniques based on Image Classification and Object Detection to Count Cars and Non-Empty Stalls in Parking Spaces". In: *International Conference on Signal Processing and Multimedia Applications (SIGMAP), Porto (PT), July 26-28*. 2018.

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[51] Antonino Furnari, Giovanni Maria Farinella, and Sebastiano Battiato. "Temporal Segmentation of Egocentric Videos to Highlight Personal Locations of Interest". In: *European Conference on Computer Vision Workshops (ECCVW), The Netherlands, Amsterdam, October 8 - 16*. Vol. 9913. Lecture Notes in Computer Science. Springer Lecture Notes in Computer Science, 2016, pp. 474–489. URL: http://iplab.dmi.unict.it/PersonalLocationSegmentation/.

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ABSTRACT E PRE-PRINTS

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