Giovanni Maria Farinella

- Personal Information
  - Researcher unique identifier: ORCID Id 0000-0002-6034-0432
  - URL for web site: https://www.dmi.unict.it/farinella/
  - Current and previous positions
    - Nov 2022-present: Full Professor in Computer Science, University of Catania, Department of Mathematics and Computer Science
    - Dec 2019 – Nov 2022: Associate Professor in Computer Science, University of Catania, Department of Mathematics and Computer Science
    - June 2021 – Present: Founder and Chief Scientific Officer of Next Vision - Spinoff of the University of Catania (https://www.nextvisionlab.it/)
    - April 2018 – Today: Associate Member of the National Research Council (CNR), Palermo, Laboratory of Cognitive Systems for Robotics
    - Dec 2016 – Nov 2019: Tenure Track Associate Professor (RTD-B), University of Catania, Department of Mathematics and Computer Science
    - Dec 2014 – Nov 2016: Assistant Professor (RTD-A), University of Catania, Department of Mathematics and Computer Science
    - Dec 2008 – Dec 2014: Postdoctoral Associate (Assegnista di Ricerca), University of Catania, Department of Mathematics and Computer Science
    - May 2005 – Oct 2008: Ph.D. Student in computer Science, University of Catania.
    - Oct 2006 – Dec 2009: Associate Member of Computer Vision and Robotics Group, Department of Engineering, Cambridge University, United Kingdom
    - A.A. 2004 - 2016: Contract Professor, Accademia di Belle Arti di Catania (AFAM-MIUR), Italy
- Prizes and awards
  - PAMI Mark Everingham Prize 2017
  - Intel's 2022 Outstanding Researcher
  - Best paper finalist at CVPR 2022
  - 2nd Place Ego4D Short-Term Object Interaction Anticipation Challenge 2024
  - 1st Place HoloAssist Mistake Detection Challenge 2024
  - 1st Place EgoExo4D Procedure Understanding Challenge 2025
  - 2021, 2023, 2024 - Unrestricted Research Grants (Contributi Liberali) by INTEL
  - 2019, 2020, 2021- Unrestricted Research Grants (Contributi Liberali) by Facebook
  - 2022, 2023, 2024 - Unrestricted Research Grants (Contributi Liberali) by Meta
  - 2020: Best Paper Award –IEEE international conference on image processing, application and systems
  - 2019: Top 10% Paper Award –International Conference on Image Processing (ICIP)
  - 2017: Finanziamento Ricerca di Base, LEGGE 11 dicembre 2016, n. 232, art.1, commi 295-302, MIUR
  - 2017: Best Oral Presentation - Workshop Technical Staff Day 2017, by STMicroelectronics
  - 2017: Patent Awards – by STMicroelectronics

- Visiting academic positions
  - 28 Aug 2015 - 6 Sept 2015, Research Visitor, Imperial College London, UK
  - 01 Sept 2014 – 5 Sept 2014, Research Visitor, University of Cambridge, UK
  - 01 Sept 2013 – 10 Sept 2013, Research Visitor, United Kingdom
  - 27 Aug 2012 - 12 Sept 2012, Research Visitor, University of Cambridge, UK
  - 05 Sept 2011 - 10 Sept 2011, Research Visitor, University of Cambridge, UK
  - 03 Sept 2010 - 07 Sept 2010, Research Visitor, University of Bristol, UK

- 22 Aug 2009 - 10 Sept 2009, Research Visitor, University of Cambridge, UK
- 1 Aug 2008 - 11 Oct 2008, Research Visitor, University of Cambridge, UK
- 26 Aug 2007 – 16 Sept 2007, Research Scholar, University of Cambridge, UK
- 3 May 2006 – 31 Oct 2006, Research Scholar, University of Cambridge, UK
- 18 July 2005 - 9 Sep 2005, Research Scholar, University of Cambridge, UK
- 4 Aug 2004 - 20 Aug 2004, Research Scholar, Queen Mary College, UK

- Teaching activities and PhD supervision
  - Courses - University of Catania
    A.A. 2024/2025: Mixed Reality and Wearable Vision
    A.A. 2021/2022 - Present, Deep Learning
    A.A. 2017/2018 - Present: Machine Learning
    A.A. 2019/2020 - Present: Programmazione 1
    A.A. 2014/2015 – A.A. 2018/2019: Social Media Management
    A.A. 2015/2016 – A.A. 2018/2019: Informatica 1
    A.A. 2011/2012- A.A. 2015/2016: Abilità Informatiche
  - Courses - Accademia di Belle Arti (AFAM-MIUR)
    A.A. 2011/2012- A.A. 2015/2016: Computer Vision
    A.A. 2009/2010 - A.A. 2010/2011: Informatica per la Grafica
    A.A. 2007/2008- A.A. 2004/2005: Informatica di Base
  - PhD Supervision and Outcome
    20 PhD students supervised
    2 former PhD students are currently Associate Professor (both have already got National Abilitation to become Full Professor), 1 former PhD student is currently RTD-a (has already got National Abilitation to become Associate Professor), all other former PhD students have got excellent industrial positions, 1 former PhD student is CEO of a Spinoff

- National and international collaborations

The PI of the UNICT Unit has already established long term research collaboration with the following National and International Univerisies, Research Centers and leading Industries in the context of Egocentric Vision.

National Univerisies/Research Centers: Università La Sapienza di Roma, Università di Padova, Università di Torino, Università Bocconi, Università di Verona, Università di Udine, Università degli Studi di Macerata, Consiglio Nazionale delle Ricerche,

International Univerisies/Research Centers: Massachusetts Institute of Technology, Carnegie Mellon University, Georgia Institute of Technology, University of Minnesota, Indiana University Bloomington, University of Pennsylvania, University of Bristol, Carnegie Mellon University Africa, King Abdullah University of Science and Technology, National University of Singapore, University of Los Andes, University of Tokyo, International Institute of Information Technology – Hyderabad, Deutsches Forschungszentrum für Künstliche Intelligenz GmbH

National and International Industries:
Meta, Toyota Motor Europe, Intel, STMicroelectronics, Philips, NVIDIA, Xenia Progetti, OSRAM, TIM, Linkverse

- Other work experience
  Research Projects Granted by Industries (Contratti conto Terzi):
  - Procedural Understanding from Egocentic Videos, Granted by Toyota Motor Europe, 2025
  - Explaining Skill Proficiency from Procedural Videos, Granted by Toyota Motor Europe, 2024

- Egocentric Dataset and Benchmark for Expert-Trainee assistance, Granted by Meta, 2024
- Integrating Synthetic Hand-Object Interaction Data into the ARIA Ecosystem, Granted by Meta, 2023
- Ego-Exo4D, Granted by Meta, 2022
- Ego4D, Granted by Facebook, 2019
- Intel Scene Graphs for Long Range Video Understanding, Granted by Intel, 2021
- SAFER - SAFEty on Road construction activities, Granted by XENIA Network Solutions, 2021
- HERO - Huge and Easy Reproduction of Objects, Granted by XENIA Network Solutions, 2021
- EVA – Egocentric Vision with Adaptation: Studio di algoritmi di domain adaptation nel contesto First Person (Egocentric) Vision, Granted by XENIA Network Solutions, 2020
- VIPS – Studio e design di algoritmi per la localizzazione a partire da sequenze di immagini acquisite con dispositivi di First Person (Egocentric) Vision, Granted by XENIA Network Solutions, 2019
- 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 XENIA Network Solutions, 2018
- ALADIN - Advanced Library for Automatic Discovery of Interrelated News, Granted by La Sicilia, 2018

PhD Scholarships Granted by Industries:

- Understanding and Explaining Human Procedural Activities form Ego-Exo Videos, Granted by Toyota Motor Europe, 2026
- Algoritmi di Machine Learning per Forecasting, Granted by Triscele, 2022
- Comprensione Automatica di Video Endoscopici, Granted by Linkverse, 2018
- Active Vision for Robot Localization, Granted by ORANGE DEV, 2018
- Sistemi di visione artificiale per la localizzazione, Granted by DWORD, 2017
- Ambient Assisted Living for Fall Detection, Granted by OSRAM, 2016
- Parking Slots Monitoring, Granted by Parksmart, 2015

- Education
  - Administrative role and position responsibility
    - Oct 2025 – Present: Rector's Delegate to Artificial Intelligence for Research at the University of Catania
    - 2025 – Present: Vice-Coordinator of PhD Course in Computer Science, University of Catania
    - 2024 – Present: Vice Director of the CINI Laboratory of Artificial Intelligence and Intelligent Systems
    - 2023 – Present: Director's Delegate for Research at the Department of Mathematics and Computer Science, University of Catania
    - June 2021 – Present: Founder and Chief Scientific Officer of Next Vision - Spinoff of the University of Catania (https://www.nextvisionlab.it/)
    - 2020 – Present: Scientific Advisor of the NVIDIA AI Technology Centre
  - Scientific organisations/Coordination of academic activities (max 2.000 characters)
    - Scientific Director of the "International Computer Vision Summer School - ICVSS" since 2007.
    - Scientific Director of the "Medical Imaging Summer School - MISS" (2014-2018).
    - Program Chair – European Conference on Computer Vision 2022
    - Programme Chair - International Conference on Computer Vision Theory and Applications, 2019/20/21/22/23
    - Program Chair - International Conference on Image Analysis and Processing, 2021
    - Program Chair – International Workshop on Machine Learning, Optimization and big Data, 2015

- Area Chair – International Conference on Computer Vision, 2017/19/21/23/25
- Area Chair – IEEE/CVF Conference on Computer Vision and Pattern Recognition 2020/21/22/23/24/25/26
- Track Chair – International Conference on Pattern Recognition 2022
- Area Chair – Winter Conference on Applications of Computer Vision 2022
- Area Chair – European Conference on Computer Vision, 2020
- Area Chair – British Machine Vision Conference, 2020/21/23
- Area Chair – Winter Conference on Applications of Computer Vision 2019
- Area Chair - International Conference on Image Analysis and Processing, 2019
- Area Chair – International Conference on Pattern Recognition, 2018
- Workshops Chair - International Conference on Image Analysis and Processing, 2025
- Workshops Chair – International Conference on Image Analysis and Processing, 2017
- Workshops Chair – International conference on Advanced Video and Signal-based Surveillance, 2017
- Workshops Chair – International Conference on Pattern Recognition, 2020
- Tutorial Chair – International Conference on 3D Vision 2024
- Organizer of the International Workshop Egocentric Vision along with CVPR 2024/25/26
- Organizer of the International Workshop on Assistive Computer Vision and Robotics, along with ECCV 2014/16/18/20/22/24/26, ICCV 2015/17/19/21/23/25
- Organizer of the International Workshop Egocentric, Perception, Interaction and Computing along with ECCV 2018/20, ICCV 2019/21, CVPR 2019/20/21/22

- Editorial activity
  - Associate Editor of International Journal of Computer Vision (IJCV), 25 July 2023 – Today
  - Associate Editor of IEEE Transaction on Pattern Analysis and Machine Intelligence (PAMI), 26 Nov 2019-Today
  - Associate Editor of the journal Pattern Recognition, Elsevier, 15 Nov 2017 – April 2025
  - Associate Editor of the journal IET Computer Vision, August 2015 – August 2023
  - Editor of different Special Issue for the following journals: IEEE Transaction on Pattern Analysis and Machine Intelligence (PAMI), Pattern Recognition Letters, Elsevier, International Journal of Computer Vision (IJCV), Computer Vision and Image Understanding (CVIU), EURASIP Journal on Image and Video Processing
  - Editor of the book *"Registration and Recognition in Images and Videos",* Series: Studies in Computational Intelligence, Vol. 532, ISBN 978-3-642-44906-2, e-ISBN: 978-3-642-44907-9, ISSN: 1860-949X, DOI: 10.1007/978-3-642-44907-9, Springer-Verlag Berlin Heidelberg, Germany, 2014
  - Editor of the book "*Advanced Topics in Computer Vision"*, Series: Advances in Computer Vision and Pattern Recognition, Springer, ISBN 978-1-4471-5519-5, e-ISBN 978-1-4471-5520-1, DOI 10.1007/978-1-4471-5520-1, Springer-Verlag Berlin Heidelberg, Germany, 2013
  - Editor of the book "*Machine Learning for Computer Vision",* Series: Studies in Computational Intelligence, Springer, Vol. 411, ISBN 978-3-642-28660-5, e-ISBN 978-3-642-28661-2, ISSN 1860-949X, e-ISSN 1860-9503, DOI 10.1007/978-3-642-28661-2, Springer-Verlag Berlin Heidelberg, Germany, 2012
  - Editor of the book "*Computer Vision: Detection, Recognition and Reconstruction",* Series: Studies in Computational Intelligence, Vol. 285, ISBN 978-3-642-12847-9, e-ISBN 978-3-642-12848-6, ISSN 1860-949X, DOI 10.1007/978-3-642-12848-6, Springer-Verlag Berlin Heidelberg, Germany, 2010

- Membership of scientific societies

- Member of the ELLIS Society, European Laboratory for Learning and Intelligent Systems.
- Member of IEEE Computer Society.
- Member of the Italian Association for Computer Vision, Pattern Recognition and Machine Learning, CVPL.
- Member of the Computer Vision Fundation (CVF)

- Funding (current and past)

  Future Artificial Intelligence Research (FAIR) - WP10.3 Egocentric Perception and 3D Vision
  Person months: 13,6
  MUR PNRR (Missione 4, Componente 2)
  Principal Investigator

  PhilHumans: Personal Health Interfaces Leveraging Human-MAchine Natural interactionS
  Person months: N/A
  MARIE SKŁODOWSKA-CURIE ACTIONS Innovative Training Networks (ITN) Call: H2020-MSCA-ITN-2018
  Principal Investigator

  ENIGMA - Egocentric Navigator for Industrial Guidance, Monitoring and Anticipation
  Person months: 19,96
  MISE - Fondo per la Crescita Sostenibile – Sportello "Fabbrica intelligente" PON I&C 2014-2020
  Principal Investigator

  VALUE - Visual Analysis for Localization and Understanding of Environments
  Person months: 5
  PO FESR 2014/2020 - Azione 1.1.5 – Regione Sicilia
  Co-Principal Investigator

  VEDI - Vision Exploitation for Data Interpretation
  Person months: 12
  PON MISE Horizon 2020
  Co-Principal Investigator

  PANORAMA -Ultra Wide Context Aware Imaging
  Person months: 18
  FP7 ENIAC 2011-1
  Coordinator of the R&D Team

- Selected 10 Publications

1. Mur-Labadia, Lorenzo, Martinez-Cantin, Ruben, Guerrero, Jose J., Farinella, Giovanni Maria, Furnari, Antonino (2026). Integrating Affordances and Attention Models for Short-Term Object Interaction Anticipation. IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, vol. 48, p. 5425-5441, ISSN: 0162-8828, doi: 10.1109/tpami.2026.3652831

2. Quattrocchi, Camillo, Furnari, Antonino, Mauro, Daniele Di, Giuffrida, Mario Valerio, Farinella, Giovanni Maria (2026). Exocentric-to-Egocentric Adaptation for Temporal Action Segmentation with Unlabeled Synchronized Video Pairs. INTERNATIONAL JOURNAL OF COMPUTER VISION, vol. 134, 112, ISSN: 0920-5691, doi: 10.1007/s11263-025-02675-1

3. Grauman, Kristen, Westbury, Andrew, Torresani, Lorenzo, Kitani, Kris, Malik, Jitendra, Afouras, Triantafyllos, Ashutosh, Kumar, Baiyya, Vijay, Bansal, Siddhant, Boote, Bikram, Byrne, Eugene, Chavis, Zach, Chen, Joya, Cheng, Feng, Chu, Fu-Jen, Crane, Sean, Dasgupta, Avijit, Dong, Jing, Escobar, Maria, Forigua, Cristhian, Gebreselasie, Abrham, Haresh, Sanjay, Huang, Jing, Islam, Md Mohaiminul, Jain, Suyog, Khirodkar, Rawal, Kukreja, Devansh, Liang, Kevin J., Liu, Jia-Wei, Majumder, Sagnik, Mao,

Yongsen, Martin, Miguel, Mavroudi, Effrosyni, Nagarajan, Tushar, Ragusa, Francesco, Ramakrishnan, Santhosh Kumar, Seminara, Luigi, Somayazulu, Arjun, Song, Yale, Su, Shan, Xue, Zihui, Zhang, Edward, Zhang, Jinxu, Castillo, Angela, Chen, Changan, Fu, Xinzhu, Furuta, Ryosuke, González, Cristina, Gupta, Prince, Hu, Jiabo, Huang, Yifei, Huang, Yiming, Khoo, Weslie, Kumar, Anush, Kuo, Robert, Lakhavani, Sach, Liu, Miao, Luo, Mi, Luo, Zhengyi, Meredith, Brighid, Miller, Austin, Oguntola, Oluwatumininu, Pan, Xiaqing, Peng, Penny, Pramanick, Shraman, Ramazanova, Merey, Ryan, Fiona, Shan, Wei, Somasundaram, Kiran, Song, Chenan, Southerland, Audrey, Tateno, Masatoshi, Wang, Huiyu, Wang, Yuchen, Yagi, Takuma, Yan, Mingfei, Yang, Xitong, Yu, Zecheng, Zha, Shengxin Cindy, Zhao, Chen, Zhao, Ziwei, Zhu, Zhifan, Zhuo, Jeff, Arbeláez, Pablo, Bertasius, Gedas, Crandall, David, Damen, Dima, Engel, Jakob, Farinella, Giovanni Maria, Furnari, Antonino, Ghanem, Bernard, Hoffman, Judy, Jawahar, C. V., Newcombe, Richard, Park, Hyun Soo, Rehg, James M., Sato, Yoichi, Savva, Manolis, Shi, Jianbo, Shou, Mike Zheng, Wray, Michael (2025). Ego-Exo4D: Understanding Skilled Human Activity from First- and Third-Person Perspectives. INTERNATIONAL JOURNAL OF COMPUTER VISION, vol. 133, p. 8356-8435, ISSN: 0920-5691, doi: 10.1007/s11263-025-02557-6

4. Grauman K., Westbury A., Byrne E., Cartillier V., Chavis Z., Furnari A., Girdhar R., Hamburger J., Jiang H., Kukreja D., Liu M., Liu X., Martin M., Nagarajan T., Radosavovic I., Ramakrishnan S. K., Ryan F., Sharma J., Wray M., Xu M., Xu E. Z., Zhao C., Bansal S., Batra D., Crane S., Do T., Doulaty M., Erapalli A., Feichtenhofer C., Fragomeni A., Fu Q., Gebreselasie A., Gonzalez C., Hillis J., Huang X., Huang Y., Jia W., Khoo W., Kolar J., Kottur S., Kumar A., Landini F., Li C., Li Y., Li Z., Mangalam K., Modhugu R., Munro J., Murrell T., Nishiyasu T., Price W., Puentes P. R., Ramazanova M., Sari L., Somasundaram K., Southerland A., Sugano Y., Tao R., Vo M., Wang Y., Wu X., Yagi T., Zhao Z., Zhu Y., Arbelaez P., Crandall D., Damen D., Farinella G. M., Fuegen C., Ghanem B., Ithapu V. K., Jawahar C. V., Joo H., Kitani K., Li H., Newcombe R., Oliva A., Park H. S., Rehg J. M., Sato Y., Shi J., Shou M. Z., Torralba A., Torresani L., Yan M., Malik J. (2024). Ego4D: Around the World in 3,000 Hours of Egocentric Video. IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, vol. PP, p. 1-32, ISSN: 0162-8828, doi: 10.1109/TPAMI.2024.3381075

5. Leonardi R., Ragusa F., Furnari A., Farinella G. M. (2024). Exploiting multimodal synthetic data for egocentric human-object interaction detection in an industrial scenario. COMPUTER VISION AND IMAGE UNDERSTANDING, vol. 242, 103984, ISSN: 1077-3142, doi: 10.1016/j.cviu.2024.103984

6. Plizzari C., Goletto G., Furnari A., Bansal S., Ragusa F., Farinella G. M., Damen D., Tommasi T. (2024). An Outlook into the Future of Egocentric Vision. INTERNATIONAL JOURNAL OF COMPUTER VISION, vol. 132, p. 4880-4936, ISSN: 0920-5691, doi: 10.1007/s11263-024-02095-7

7. Furnari A., Farinella G. M. (2023). Streaming egocentric action anticipation: An evaluation scheme and approach. COMPUTER VISION AND IMAGE UNDERSTANDING, vol. 234, 103763, ISSN: 1077-3142, doi: 10.1016/j.cviu.2023.103763

8. Ragusa F., Furnari A., Farinella G. M. (2023). MECCANO: A multimodal egocentric dataset for humans behavior understanding in the industrial-like domain. COMPUTER VISION AND IMAGE UNDERSTANDING, vol. 235, 103764, ISSN: 1077-3142, doi: 10.1016/j.cviu.2023.103764

9. Damen D., Doughty H., Farinella G. M., Furnari A., Kazakos E., Ma J., Moltisanti D., Munro J., Perrett T., Price W., Wray M. (2022). Rescaling Egocentric Vision: Collection, Pipeline and Challenges for EPIC-KITCHENS-100. INTERNATIONAL JOURNAL OF COMPUTER VISION, vol. 130, p. 33-55, ISSN: 0920-5691, doi: 10.1007/s11263-021-01531-2

10. Furnari, Antonino, Farinella, Giovanni (2021). Rolling-Unrolling LSTMs for Action Anticipation from First-Person Video. IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, p. 1, ISSN: 0162-8828, doi: 10.1109/TPAMI.2020.2992889