

# Vittorio Cuculo

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## Education

- 2014-2017 PhD in Mathematical Sciences**  
University of Milan  
Thesis: *"A probabilistic approach to the construction of a multimodal affect space"*  
Supervisor: Prof. Giuseppe Boccignone
- 2012-2014 Master's Degree in Computer Science for Communication**  
Department of Computer Science  
University of Milan  
Degree mark: 110/110 cum laude  
Thesis: *"Use of sparse coding in a computational model for the analysis of facial affective expressions"*
- 2007-2011 Bachelor's Degree in Computer Science**  
Department of Computer Science  
University of Pisa  
Thesis: *"Integration of messaging and video calling tools in the Diaspora\* project"*

## Research Activity

- Mar 2023 - present Assistant Professor**  
Department of Engineering "Enzo Ferrari"  
University of Modena and Reggio Emilia
- Mar 2018 - Mar 2020 Post-Doctoral Research Fellow**  
Department of Computer Science "Giovanni degli Antoni"  
University of Milan
- Nov 2017 - Feb 2018 Research Fellow**  
Department of Computer Science "Giovanni degli Antoni"  
University of Milan
- Mar 2025 - Mar 2037 National Scientific Qualification for Associate Professor**  
for the Academic Recruiting field 09/H - Computer engineering, obtained in the ASN 2023-2025  
valid from 13/11/2025 to 13/11/2037
- Mar 2025 - Mar 2037 National Scientific Qualification for Associate Professor**  
for the Academic Recruiting field 01/B - Informatics, obtained in the ASN 2023-2025  
valid from 07/03/2025 to 07/03/2037

## Teaching Activity

- 2025 - pres Teaching assignment**
- 2023 - 2024** Computer Vision and Cognitive Systems  
Master's Degree in Artificial Intelligence Engineering  
University of Modena and Reggio Emilia

- 2023 - present**      **Teaching assignment**  
IoT and 3D Intelligent Systems  
Master's Degree in Artificial Intelligence Engineering  
University of Modena and Reggio Emilia
- 2024 - 2025**      **Teaching assignment**  
**2023 - 2024**      Programmazione di Sistema  
Bachelor's Degree in Computer Engineering  
University of Modena and Reggio Emilia - Mantua Campus
- 2021 - 2022**      **Adjunct Professor**  
Intelligenza artificiale e intelligenza umana  
Master's Degree in Cognitive Sciences  
University of Milan
- 2019 - 2023**      **Adjunct Professor**  
Statistica e Analisi dei dati  
Computer Science Department  
University of Milan
- 2018 - 2019**      **Adjunct Professor**  
Educational Laboratory "Information Management and Web"  
Bachelor's Degree in History  
University of Milan
- 2019**              **Tutoring activity (art.45)**  
Computer Science Assessment Courses  
University of Milan

## Invited Lectures

- Jan 2026**      **Organizer and speaker**  
Multidisciplinary seminar titled "Multidisciplinary diagnosis and treatment of narcolepsy"  
with IRCCS ISNB of Bologna and Takeda Inc.  
Tecnopolo di Modena, Italy
- Jun 2025**      **Invited lecture**  
Title: "An introduction to the use of PyTorch and Google Colab Environments" (3 hours)  
International Summer School on Artificial Intelligence (AI-DLDA)  
University of Udine, Italy
- Sep 2024**      **Invited lecture**  
Title: "Artificial Intelligence and Food Innovation"  
Talk held during the event "Artificial Intelligence in Emilia-Romagna: focus on the Food sector"  
Confindustria Piacenza, Italy
- Mar 2024**      **Invited lecture**  
Title: "A look at Artificial Intelligence: How our gaze influences the world" (3 hours)  
Master's Degree in Interior and Spatial Design  
Politecnico di Milano, Milan
- Mar 2023**      **Invited lecture**  
Title: "Affective computing" (2 hours)  
Master in Interaction Design  
Domus Academy, Milan
- Feb 2019**      **Invited lecture**  
Title: "Affective computing" (4 hours)  
Master in Interaction Design  
Domus Academy, Milan

- Jan 2019**    **Invited lecture and workshop**  
 Title: "Analysing emotion perception in dyadic interaction"  
 Ref: Prof. Dr. Phil. Christoph Klein  
 University Hospital Freiburg, Germany
- Oct 2018**    **Invited lecture**  
 Title: "Affective computing" (4 hours)  
 Master in Interaction Design  
 Domus Academy, Milan
- Feb 2017**    **Invited lecture**  
 Title: "Affective computing" (4 hours)  
 Master in Interaction Design  
 Domus Academy, Milan

## Work Experience

- Mar 2020 - Mar 2023**    **Head of R&D and Project Manager**  
 dotdotdot srl, Milan  
 Project Manager for healthcare projects.  
 Researcher in affective computing, wellbeing monitoring, and telemedicine.  
 Development of machine learning algorithms for indoor positioning.
- Aug 2013 - Aug 2017**    **Physical Computing Specialist**  
 dotdotdot srl, Milan  
 Development of permanent and temporary interactive installations for public museums and private companies. Implementation of prototypes and products for Human-Computer Interaction (HCI) and Natural Interaction (NI) based on computer vision, embedded systems, sensors, mobile applications, and web technologies.

## Training Activities

- Sept 2018**    **Summer school**  
 Student at Gaussian Process and Uncertainty Quantification Summer School (GPSS 2018)  
 University of Sheffield, UK
- Jul 2015**    **Summer school**  
 Student at International Computer Vision Summer School (ICVSS 2015)  
 University of Catania
- Sept 2009 - Feb 2010**    **Erasmus Lifelong Learning Programme (LLP)**  
 Student at Department of Information Technology  
 Uppsala University, Sweden

## Project Activities

- 2023 - present**    **ITSERR**  
 PNRR project Italian Strengthening of Esfri RI Resilience  
 Role: Unit member  
 Funded by: European Union  
 Call: "NextGenerationEU (CUP:B53C22001770006)"

**2019 - 2022 REFLOW**

constRuctive mEtabolic processes For material FLOWs in urban and peri-urban environments across Europe

Role: Unit member (with Opendot srl)

Funded by: European Union

Call: "H2020-EU.3.5. - Climate action, Environment, Resource Efficiency and Raw Materials"

**2019 - 2020 Stairway to elders**

Bridging space, time and emotions in their social environment for wellbeing

Role: Dissemination coordinator

Funded by: Cariplo Foundation

Call: "Social Research on Aging: People, Places and Relationships", grant no. 2018-0858.

**2014 - 2017 Interpreting emotions**

A computational tool integrating facial expressions and biosignals based shape analysis and bayesian networks

Role: Participant

Funded by: MIUR

Call: "Fund for Basic Research Investments" (FIRB)

## Conference Service Activities

### Organizing Committee

**2026**

Area Chair - of the international conference "34th ACM International Conference on Multimedia" (ACMMM 2026) - CORE Ranking: A\*. Rio de Janeiro, Brazil, November 2026.

Reference: <https://2026.acmmm.org/>

Program Chair - of the "22nd Conference on Information and Research Science Connecting to Digital and Library Science" (IRCDL 2026). Modena, Italy, February 2026.

Reference: <https://ircdl2026.unimore.it/>

**2025**

Associate Chair - for the Poster Papers Track of the "24th International Conference on Mobile and Ubiquitous Multimedia" (MUM 2025). Enna, Italy, December 2025.

Reference: <https://mum-conf.org/2025/>

Organizer and Workshop Chair - of the international workshop "Human-inspired Computer Vision" (HCV 2025) at the "International Conference on Computer Vision" (ICCV 2025). Honolulu, Hawaii, October 2025.

Reference: <https://sites.google.com/view/hcvworkshop2025>

Area Chair - of the international conference "33rd ACM International Conference on Multimedia" (ACMMM 2025). Dublin, Ireland, October 2025.

Reference: <https://2025.acmmm.org/>

Track Chair - of the international conference "40th ACM/SIGAPP Symposium On Applied Computing (SAC 2025)" – Track on "Graph Models for Learning and Recognition" (GMLR 2025). Catania, Italy, March 2025.

Reference: <https://phuselab.di.unimi.it/GMLR2025/>

Publicity Chair - for the "21st Conference on Information and Research Science Connecting to Digital and Library Science" (IRCDL 2025). Udine, Italy, February 2025.

Reference: <https://ircdl2025.uniud.it/>

Organizer and Workshop Chair - of the international workshop "4th Automatic Affect Analysis and Synthesis Workshop" (3AS 2025) at the "International Conference on Image Analysis and Processing" (ICIAP 2025). Rome, Italy, September 2025.

Reference: <https://sites.google.com/unimib.it/3asiciap2025>

## 2024

Area Chair - of the international conference “32nd ACM International Conference on Multimedia” (ACMMM 2024) – awarded Outstanding Area Chair. Melbourne, Australia, October 2024.

Reference: <https://2024.acmmm.org/>

Workshop Chair - of the international workshop “Human-inspired Computer Vision” (HCV 2024) at the “European Conference on Computer Vision” (ECCV 2024). Milan, Italy, September 2024.

Reference: <https://sites.google.com/view/hcvworkshop2024>

Session Chair - for the international conference “33rd International Joint Conference on Artificial Intelligence” (IJCAI 2024) – session “CV: Biometrics, face, gesture and pose recognition”. Jeju, South Korea, August 2024.

Reference: <https://ijcai24.org/>

## 2023

Tutorial Organizer - “Remote Physiological Sensing: State of the Art and Applications” at the “International Conference on Image Analysis and Processing” (ICIAP 2023). Udine, Italy, September 2023.

Reference: <https://sites.google.com/view/iciap2023tutorial-rps>

Area Chair - of the international conference “31st ACM International Conference on Multimedia” (ACMMM 2023). Ottawa, Canada, October 2023.

Reference: <https://www.acmmm2023.org/>

Organizer and Workshop Chair - of the international workshop “Advances in Gaze Analysis, Visual attention and Eye-gaze modelling” (AGAVE 2023) at the “International Conference on Image Analysis and Processing” (ICIAP 2023). Udine, Italy, September 2023.

Reference: <https://sites.google.com/view/agave2023>

Organizer and Workshop Chair - of the international workshop “3rd Automatic Affect Analysis and Synthesis Workshop” (3AS 2023) at the “International Conference on Image Analysis and Processing” (ICIAP 2023). Udine, Italy, September 2023.

Reference: <https://sites.google.com/unimib.it/3asiciap2023>

## Student Project Chair

### 2023

Student Project Chair - for the ELLIS (European Laboratory for Learning and Intelligent Systems) Summer School on Large-Scale AI for Research and Industry. Modena, Italy, September 2023.

Reference: <https://www.ellis.unimore.it/summer-school/>

## Technical Program Committee Member

### 2026

BMVC 2026 - 37th British Machine Vision Conference Lancaster, UK

IJCAI-ECAI 2026 - 35th International Joint Conference on Artificial Intelligence Bremen, DE

### 2025

ICCV 2025 - International Conference on Computer Vision Honolulu, HI

IJCAI 2025 - 34th International Joint Conference on Artificial Intelligence Montreal, CA

WACV 2025 - IEEE/CVF Winter Conference on Applications of Computer Vision Tucson, AZ

### 2024

SAC 2024 - 39th ACM Symposium on Applied Computing Avila, ES

### 2023

DFAD 2023 - Workshop on DeepFake Analysis and Detection (at ICCV 2023) Paris, FR

ICIAP 2023 - 22nd International Conference on Image Analysis and Processing Udine, IT

SAC 2023 - 38th ACM Symposium on Applied Computing Tallinn, EE

### 2022

SAC 2022 - 37th ACM Symposium on Applied Computing Brno, CZ

SCDM 2022 - 5th International Conference on Soft Computing and Data Mining Virtual

AIHA 2022 - Workshop on Artificial Intelligence for Healthcare Applications (at ICPR 2022) Montreal, CA

ICPR 2022 - 26th International Conference on Pattern Recognition	Montreal, CA
<b>2020</b>	
ICPR 2020 - 25th International Conference on Pattern Recognition	Milan, IT
CARE 2020 - Workshop on Pattern Recognition for Positive Technology (at ICPR 2020)	Milan, IT
AIHA 2020 - Workshop on Artificial Intelligence for Healthcare Applications (at ICPR 2020)	Milan, IT
SAC 2020 - 35th ACM Symposium on Applied Computing	Virtual
SCDM 2020 - 4th International Conference on Soft Computing and Data Mining	Melaka, MY
<b>2019</b>	
Datamod 2019 - 8th Symposium From Data to Models and Back (at FM 2019)	Porto, PT
ICIAP 2019 - 20th International Conference on Image Analysis and Processing	Trento, IT

## Journal Service Activities

### Editorial Board Member

Guest Editor - of the Special Issue on Human-Inspired Computer Vision in the journal "International Journal of Computer Vision" (Springer). International peer-reviewed publication ranked Q1 (Scimago 2023, IF: 9.3) in the field of "Computer Science".

From 2025 to present.

Reference: <https://link.springer.com/journal/11263/updates/27828406>

Guest Editor - of the Special Issue "Advances in Automatic Affect Analysis and Synthesis" in the journal "Frontiers in Artificial Intelligence" (Frontiers). International peer-reviewed publication ranked Q2 (Scimago 2023) in the field of "Computer Science > Artificial Intelligence".

From 2025 to present.

Reference: <https://www.frontiersin.org/research-topics/74012>

Associate Editor - of the journal "Applied Intelligence" (Springer Nature).

International peer-reviewed journal in the field "Computer Science > Artificial Intelligence".

From 2024 to present.

Reference: <https://link.springer.com/journal/10489/editorial-board>

Guest Editor - of the Special Issue "Remote Physiological Measurement: Novel algorithms and application areas" in the journal "Biomedical Signal Processing and Control" (Elsevier).

International peer-reviewed Q1 journal (Scimago 2023) in the field "Computer Science > Signal Processing".

From 2023 to 2024.

Reference: <https://www.sciencedirect.com/special-issue/10KF5VGFOXW>

Member of the Editorial Board with role of Review Editor - for the journal "Frontiers in Robotics and AI" (Frontiers Media) in the section "Robot Vision and Artificial Perception".

International peer-reviewed journal in the fields "Computer Science > Artificial Intelligence" and "Computer Science Applications".

From 2023 to present.

Reference: <https://www.frontiersin.org/journals/robotics-and-ai/editors>

Member of the Editorial Board with role of Review Editor - for the journal "Frontiers in Neuroscience" (Frontiers Media) in the section "Neuroprosthetics".

International peer-reviewed journal in the field "Neuroscience".

From 2023 to present.

Reference: <https://www.frontiersin.org/journals/neuroscience/editors>

Member of the Topical Advisory Panel - of the journal "Journal of Imaging" (MDPI).

International peer-reviewed journal in the field "Computer Science > Computer Vision and Pattern Recognition".

From 2021 to present.

Reference: [https://www.mdpi.com/journal/jimaging/topical\\_advisory\\_panel?search=cuculo](https://www.mdpi.com/journal/jimaging/topical_advisory_panel?search=cuculo)

## Reviewer

IEEE - Transactions on Multimedia  
IEEE - Transactions on Image Processing  
IEEE - Journal of Biomedical and Health Informatics  
IEEE - Transactions on Neural Networks and Learning Systems  
IEEE - Open Journal of Signal Processing  
IEEE - Transactions on Systems, Man and Cybernetics  
IEEE - Transactions on Emerging Topics in Computing  
Springer Nature - Applied Intelligence  
Springer Nature - The Visual Computer  
Nature - Scientific Reports  
ACM - Communications of the ACM  
ACM - Transactions on Computing for Healthcare  
Wiley & Sons - Computer Graphics Forum  
PeerJ - Computer Science  
PLOS - ONE

## Other Service Activities

- 2025 - current**      **Member of the Communication Group**  
Member of the Communication Working Group of the Department of Engineering University of Modena and Reggio Emilia.
- 2025**            **Reviewer for research projects**  
Reviewer for Starting Grant 2025 research projects at the University of Cagliari.
- 2024 - present**      **Co-supervisor of the PhD project “Automatic Cataplexy Detection through Video Analysis”**  
PhD program in ICT, XL cycle, University of Modena and Reggio Emilia.  
Reference: <https://www.ict.unimore.it/ResearchTopics.asp?Cycle=40>
- 2024 - present**      **Member of the Teaching Board of the PhD program in ICT (International Doctorate in Information and C**  
University of Modena and Reggio Emilia.  
Reference: <https://www.ict.unimore.it/Organization.asp>
- 2024 - present**      **Evaluator for PhD Program**  
Evaluator for the selection of the PhD program at ELLIS - European Laboratory for Learning and Intelligent Systems.  
Reference: <https://ellis.eu/phd-postdoc>.
- 2019 - 2020**      **Postdoctoral Researcher Representative**  
Representative in the Department Council at the Department of Computer Science, University of Milan.

## Awards and Recognitions

- 2025**            **ISCRA-C**  
Winner of the Italian SuperComputing Resource Allocation (ISCRA) grant, awarded by the CINECA consortium, for access to up to 10,000 GPU hours on the LEONARDO supercomputer's computing resources in support of research activities.
- 2025**            **Outstanding Workshop Paper**  
For the paper *“Decoding Facial Expressions in Video: A Multiple Instance Learning Perspective on Action Units”*  
4th Automatic Affect Analysis and Synthesis Workshop at ICIAP 2025.
- 2025**            **Outstanding Reviewer**  
Nominated Outstanding Reviewer of WACV 2025 conference.

- 2024 Outstanding Area Chair**  
Nominated Outstanding Area Chair of ACM Multimedia 2024 conference.
- 2024 IS CRA-C**  
Winner of the Italian SuperComputing Resource Allocation (IS CRA) grant, awarded by the CINECA consortium, for access to up to 10,000 GPU hours on the LEONARDO supercomputer's computing resources in support of research activities.
- 2024 Project ARIA**  
Accepted as an academic partner for Meta Reality Labs' Project ARIA research program.
- 2018 NVIDIA GPU Grant**  
Donation from NVIDIA of a Quadro P6000 GPU to support research activities.
- 2017 Best Paper Award**  
For the paper "*Virtual EMG via facial video analysis*"  
19th International Conference on Image Analysis and Processing (ICIAP 2017).
- 2015 Honorable Mention**  
For the report "*Additional sensors and multi-modal computing for assistive computer vision*"  
Essay competition, International Computer Vision Summer School (ICVSS 2015).
- 2014 PhD Scholarship**  
For the PhD School in Mathematical Sciences  
Department of Mathematics, University of Milan  
funded by MIUR for the period 2014/2017.
- 2011 Student Grant**  
Funded by Google for open source software development  
as part of the Google Summer of School program.

## Participation in Groups

- 2025 - present ELLIS Society**  
Member of the European Laboratory for Learning and Intelligent Systems
- 2025 - 2026 ACM**  
Member of the Association for Computing Machinery
- 2023 - present AImage Lab**  
Member of the AImageLab laboratory  
Department of Engineering, University of Modena and Reggio Emilia  
Director: Prof. Rita Cucchiara.
- 2022 - 2024 MPAI**  
Member of the working group for the definition of a standard for Portable Avatar Format (MPAI-PAF).  
Moving Picture, Audio and Data Coding by Artificial Intelligence (MPAI)  
Ref: Eng. Leonardo Chiariglione.
- 2018 - present PHuSe Lab**  
Founding member of the Perceptual computing and Human Sensing Lab  
Department of Computer Science, University of Milan  
Director: Prof. Giuseppe Boccignone.
- 2015 - present CVPL**  
Member of the Italian Association for research in Computer Vision,  
Pattern recognition and machine Learning (formerly GIRPR).

## Third Mission Activities

- 2023 - current**      **European Researchers' Night**  
Continuous participation in the European Researchers' Night events as co-organizer for the AImageLab laboratory, Modena.
- 2022**            **Researchers' Night**  
Invited speaker for the event "The Technological Gaze on Migrants" organized by Naga, Milan at the National Museum of Science and Technology "Leonardo Da Vinci", Milan.
- 2016**            **MEET me TONIGHT - Researchers' Night**  
Interactive workshop for schools at the Indro Montanelli Gardens, Milan.
- 2016**            **Open talk**  
Speaker for the event "Machine Learning between Ethics, Art and Law" at Opendot, Milan.

## Technology Transfer Activities

- 2026 - 2029**    **Takeda Development Center Americas, Inc., USA**  
**Third-party contract** for the project "Automatic Cataplexy Detection through Video Analysis".  
Role: Scientific Responsible.
- 2014 - present**    **OpenDot Srl, Milan**  
**Founding member** of OpenDot Srl registered as an innovative start-up.  
Digital fabrication laboratory, research hub and open innovation.  
Numerous collaborations with Politecnico di Milano and University of Milan for thesis projects.

## Patents

- Jan 2026**      **Patent for industrial invention**  
Holder of a European patent for an industrial invention for an indoor localization method, developed at dotdotdot srl.  
Application number: EP23161138  
Filing date: 10/03/2023, Grant date: 01/01/2026  
<https://register.epo.org/application?number=EP23161138>
- Mar 2022**      **Patent for industrial invention**  
Holder of a national patent for industrial invention for an indoor localization method, developed at dotdotdot srl.  
Application number: 102022000004673  
Filing date: 11/03/2022, Grant date: 01/03/2024

## Scientific Publications

### Journal Articles

- [J-1] Remote Respiration Measurement with RGB Cameras: A Review and Benchmark  
Giuseppe Boccignone, Vittorio Cuculo, Alessandro D'Amelio, Giuliano Grossi, Raffaella Lanzarotti, and Sabrina Patania  
*ACM Computing Surveys* (2025). ACM New York, NY, USA, 2025
- [J-2] Sanctuaria-Gaze: A Multimodal Egocentric Dataset for Human Attention Analysis in Religious Sites  
Giuseppe Cartella, Vittorio Cuculo, Marcella Cornia, Marco Papisidero, Federico Ruoizzi, and Rita Cucchiara  
*Journal on Computing and Cultural Heritage (JOCCH)* (2025). ACM New York, NY, USA, 2025
- [J-3] Unveiling the Truth: Exploring Human Gaze Patterns in Fake Images  
Giuseppe Cartella, Vittorio Cuculo, Marcella Cornia, and Rita Cucchiara  
*IEEE Signal Processing Letters* (2024). IEEE, 2024

- [J-4] Enhancing rPPG Pulse-Signal Recovery by Facial Sampling and PSD Clustering  
Giuliano Grossi, Giuseppe Boccignone, Donatello Conte, Vittorio Cuculo, Alessandro D'Amelio, and Raffaella Lanzarotti  
*Biomedical Signal Processing and Control* (2024). Elsevier, 2024
- [J-5] Predicting engagement of older people's virtual teams from video call analysis  
Nicoletta Noceti, Simone Campisi, Alice Chirico, Vittorio Cuculo, Giuliano Grossi, Monica Michelotto, et al.  
*International Journal of Human-Computer Interaction* (2024). Taylor & Francis, 2024
- [J-6] Using Gaze for Behavioural Biometrics  
Alessandro D'Amelio, Sabrina Patania, Sathya Bursic, Vittorio Cuculo, and Giuseppe Boccignone  
*Sensors* 23.3 (2023) p. 1262. MDPI, 2023
- [J-7] Inferring Causal Factors of Core Affect Dynamics on Social Participation through the Lens of the Observer  
Alessandro D'Amelio, Sabrina Patania, Sathya Buršić, Vittorio Cuculo, and Giuseppe Boccignone  
*Sensors* 23.6 (2023) p. 2885. MDPI, 2023
- [J-8] pyVHR: a Python framework for remote photoplethysmography  
Giuseppe Boccignone, Donatello Conte, Vittorio Cuculo, Alessandro D'Amelio, Giuliano Grossi, Raffaella Lanzarotti, and Edoardo Mortara  
*PeerJ Computer Science* 8 (2022) e929. PeerJ Inc., 2022
- [J-9] An Open Framework for Remote-PPG Methods and their Assessment  
Giuseppe Boccignone, Donatello Conte, Vittorio Cuculo, Alessandro D'Amelio, Giuliano Grossi, and Raffaella Lanzarotti  
*IEEE Access* (2020) pp. 216083–216103. IEEE, 2020
- [J-10] On Gaze Deployment to Audio-Visual Cues of Social Interactions  
Giuseppe Boccignone, Vittorio Cuculo, Alessandro D'Amelio, Giuliano Grossi, and Raffaella Lanzarotti  
*IEEE Access* (2020) pp. 161630–161654. IEEE, 2020
- [J-11] Robust Single-Sample Face Recognition by Sparsity-Driven Sub-Dictionary Learning Using Deep Features  
Vittorio Cuculo, Alessandro D'Amelio, Giuliano Grossi, Raffaella Lanzarotti, and Jianyi Lin  
*Sensors* 19.1 (2019) p. 146. Multidisciplinary Digital Publishing Institute, 2019
- [J-12] Deep construction of an affective latent space via multimodal enactment  
Giuseppe Boccignone, Donatello Conte, Vittorio Cuculo, Alessandro D'Amelio, Giuliano Grossi, and Raffaella Lanzarotti  
*IEEE Transactions on Cognitive and Developmental Systems (TCDS)* 10.4 (2018) pp. 865–880. IEEE, 2018

## Conference Proceedings

- [P-1] ECoGNet: an EEG-based Effective Connectivity Graph Neural Network for Brain Disorder Detection  
Jacopo Burger, Vittorio Cuculo, Alessandro D'Amelio, Giuliano Grossi, and Raffaella Lanzarotti  
*Proceedings of the IEEE International Joint Conference on Neural Networks, IJCNN*, 2025
- [P-2] Modeling Human Gaze Behavior with Diffusion Models for Unified Scanpath Prediction  
Giuseppe Cartella, Vittorio Cuculo, Alessandro D'Amelio, Marcella Cornia, Giuseppe Boccignone, and Rita Cucchiara  
*Proceedings of the IEEE/CVF international conference on computer vision, ICCV*, 2025
- [P-3] Unravelling Neurodivergent Gaze Behaviour through Visual Attention Causal Graphs  
Giuseppe Cartella, Vittorio Cuculo, Alessandro D'Amelio, Rita Cucchiara, and Giuseppe Boccignone  
*International Conference on Image Analysis and Processing, ICIAP*, 2025
- [P-4] TPP-Gaze: Modelling Gaze Dynamics in Space and Time with Neural Temporal Point Processes  
Alessandro D'Amelio, Giuseppe Cartella, Vittorio Cuculo, Manuele Lucchi, Marcella Cornia, Rita Cucchiara, and Giuseppe Boccignone

- [P-5] Decoding Facial Expressions in Video: A Multiple Instance Learning Perspective on Action Units  
Livia Del Gaudio, Vittorio Cuculo, and Rita Cucchiara  
*International Conference on Image Analysis and Processing, ICIAP Workshops, 2025 - **Outstanding Workshop Paper***
- [P-6] Trends, Applications, and Challenges in Human Attention Modelling  
Giuseppe Cartella, Marcella Cornia, Vittorio Cuculo, Alessandro D'Amelio, Dario Zanca, Giuseppe Boccignone, and Rita Cucchiara  
*Proceedings of the Thirty-Third International Joint Conference on Artificial Intelligence, IJCAI, 2024 - **Survey Track***
- [P-7] Pixels of Faith: Exploiting Visual Saliency to Detect Religious Image Manipulation  
Giuseppe Cartella, Vittorio Cuculo, Marcella Cornia, Marco Papisidero, Federico Ruozzi, and Rita Cucchiara  
*Proceedings of the European Conference on Computer Vision Workshops, ECCV, 2024*
- [P-8] On using rPPG signals for DeepFake detection: a cautionary note  
Alessandro D'Amelio, Raffaella Lanzarotti, Sabrina Patania, Giuliano Grossi, Vittorio Cuculo, Andrea Valota, and Giuseppe Boccignone  
*International Conference on Image Analysis and Processing, ICIAP 2023, 2023, Springer*
- [P-9] Pain and Fear in the Eyes: Gaze Dynamics Predicts Social Anxiety from Fear Generalisation  
Sabrina Patania, Alessandro D'Amelio, Vittorio Cuculo, Matteo Limoncini, Marco Ghezzi, Vincenzo Conversano, and Giuseppe Boccignone  
*International Conference on Image Analysis and Processing, ICIAP Workshops, 2023, Springer*
- [P-10] DeepFakes Have No Heart: A Simple rPPG-Based Method to Reveal Fake Videos  
Giuseppe Boccignone, Sathya Bursic, Vittorio Cuculo, Alessandro D'Amelio, Giuliano Grossi, Raffaella Lanzarotti, and Sabrina Patania  
*International Conference on Image Analysis and Processing, ICIAP, 2022, Springer*
- [P-11] How to Look Next? A Data-Driven Approach for Scanpath Prediction  
Giuseppe Boccignone, Vittorio Cuculo, and Alessandro D'Amelio  
*Formal Methods. FM International Workshops, 2020*
- [P-12] Anomaly Detection from Log Files Using Unsupervised Deep Learning  
Sathya Bursic, Vittorio Cuculo, and Alessandro D'Amelio  
*Formal Methods. FM International Workshops, 2020*
- [P-13] Gender Recognition in the Wild with Small Sample Size-A Dictionary Learning Approach  
Alessandro D'Amelio, Vittorio Cuculo, and Sathya Bursic  
*Formal Methods. FM International Workshops, 2020*
- [P-14] Social traits from stochastic paths in the core affect space  
Giuseppe Boccignone, Vittorio Cuculo, Alessandro D'Amelio, and Raffaella Lanzarotti  
*Proceedings of the 13th EAI International Conference on Pervasive Computing Technologies for Healthcare, 2019, ACM*
- [P-15] Problems with saliency maps  
Giuseppe Boccignone, Vittorio Cuculo, and Alessandro D'Amelio  
*International Conference on Image Analysis and Processing, ICIAP, 2019, Springer*
- [P-16] OpenFACS: an open source FACS-based 3D face animation system  
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