Cigdem Beyan -- CURRICULUM VITAE

Ph.D. (09/2011 – 05/2015)
The University of Edinburgh, College of Science and Engineering,
Informatics: IPAB: Robotics, Computer Vision, Computer Graphics and Animation, Edinburgh, UK.
Thesis title: Detection of Unusual Fish Trajectories from Underwater Videos
https://era.ed.ac.uk/handle/1842/10561

Master of science (09/2008 - 12/2010)
Middle East Technical University, Graduate School of Informatics, Department of Information Systems,
Ankara, Turkey.
GPU: 3.88/4.00
Thesis title: Object Tracking for Surveillance Applications Using Thermal and Visible Band Video Data
Fusion

Bachelor's degree in computer engineering (09/2004 – 06/2008)
Baskent University, Ankara, Turkey.
GPU: 3.64/4.00
Thesis title: Cancer Diagnosis with Gene Expression Data

CURRENT POSITION

Associate Professor in Computer Science Department, University of Verona, Italy.
https://www.di.univr.it/?ent=persona&id=80405&lang=it

RESEARCH PROJECTS INVOLVED

[Ongoing] From 01/11/2021 **local principal investigator** of the international project "Computer vision to expand monitoring and accelerate assessment of coastal fish (CoastVision)" funded by the Research Council of Norway. https://www.hi.no/en/hi/forskning/projects/coastvision

From 01/04/2021 to 31/08/2023 **Co-PI** of project "Assistive Robots wiTh EMotIonal Skills (ARTEMIS)" financed by Fondazione Valorizzazione Ricerca (VRT).

From 01/03/2021 to 31/08/2023, participated in the MUR PNRR project FAIR - Future AI Research (PE00000013), funded by NextGenerationEU.

From 01/03/2021 to 31/08/2023, participated in Horizon 2020 AI4Media financed by EU (n. 951911).

From 01/03/2021 to 31/08/2023, participated in Horizon 2020 SPRING financed by EU (n. 871245).

From 02/09/2015 to 01/09/2019, participated in and coordinated the project "Multimodal Identification of Emergent Leaders in Small Group Social Interactions" in Italiano di Tecnologia in Genova.

From 01/09/2019 to 29/09/2021, engaged in an international collaboration on the project titled 'Multimodal Nonverbal Behavior Analysis of Public Speakers' with Professor Enkelejda Kasneci at the University of Tübingen, Germany.

From 08/09/2011 to 30/09/2013, participated in project FP7 Fish4Knowledge financed by EU (n. 257024).

From 01/01/2009 to 31/12/2009, participated in the project 'Abandoned-Object Detection System Using Thermal and Visible Band Video Cameras' within the Computer Vision and Remote Sensing Research Group at Middle East Technical University.

From 01/01/2010 to 31/12/2010, participated in the project "Probabilistic Modelling of miRNA mRNA Duplexes" financed by The Scientific and Technological Research Council of Turkey (Tubitak), Grant No. 110E160.

ORGANIZATION, MANAGEMENT, AND COORDINATION OF NATIONAL AND INTERNATIONAL RESEARCH GROUPS, OR PARTICIPATION IN THEM

From 01/03/2021 to 31/08/2023, participated in the activities of the 'Multimedia and Human Understanding Group' (MHUG) directed by Prof. Niculae Sebe and Prof. Elisa Ricci (http://mhug.disi.unitn.it/#/people).

From 26/04/2021 to 01/09/2023, participated as an Affiliated Researcher in the activities of the Pattern Analysis and Computer Vision (PAVIS) research line, directed by Dr. Alesso Del Bue.

From 02/09/2015 to 28/02/2021, participated as a post-doctoral researcher in the activities of the Pattern Analysis and Computer Vision (PAVIS) research line, directed by Professor Vittorio Murino (02/09/2015 - 31/08/2019) and Dr. Alessio Del Bue (01/09/2019 - 28/02/2021) at the Italian Institute of Technology (IIT) in Genoa.

From 08/09/2011 to 12/05/2015, participated as a Ph.D. student in the activities of the research lab directed by Prof. Robert (Bob) Fisher at the University of Edinburgh (Edinburgh, United Kingdom), which was characterized by national and international collaborations.

From 01/01/2009 to 01/03/2010, participated as a research fellow in the projects and activities of the Computer Vision and Remote Sensing' laboratory, directed by Prof. Alptekin Temizel at Middle East Technical University, Ankara, Turkey.

From 01/01/2010 to 31/12/2010, participated as a research assistant in the research laboratory led by Prof. Hasan Ogul at Baskent University (Ankara, Turkey), with a focus on the project titled "MicroRNA Target Recognition".

DELIVERED SPEECHES IN THE INTERNATIONAL CONFERENCES/ INVITED TALKS / KEYNOTE SPEECHES

The presenter at the following conferences/workshops

• Keynote speaker at the Expressive Encounters Workshop, held in conjunction with ECCV 2024. https://expressive-encounters-workshop.github.io/2024/

• 17th International Conference on Advanced Visual Interfaces (AVI 2024) in Arenzano (Genoa), Italy, with the article "Diffusion-Based Unsupervised Pre-training for Automated Recognition of Vitality Forms" (doi: 10.1145/3656650.3656689).

• 22nd ACM International Conference on Multimodal Interaction (ACM ICMI 2020), online participation with the article "Analysis of Face-Touching Behavior in Large Scale Social Interaction Dataset" (doi: 10.1145/3382507.3418876).

• 10th International Workshop on Human Behavior Understanding (HBU) held at the International Conference on Computer Vision (ICCV) 2019 in Seoul, Korea, with the article "Voice Activity Detection by Upper Body Motion Analysis and Unsupervised Domain Adaptation" (doi: 10.1109/ICCVW.2019.00159).

• 26th ACM Multimedia (ACMMM 2018) in Seoul, Korea, with the article "Investigation of Small Group Social Interactions Using Deep Visual Activity-Based Nonverbal Features" (doi: 10.1145/3240508.3240685).

• 19th ACM International Conference on Multimodal Interaction (ACM ICMI 2017) in Glasgow, Scotland, with the article "Multi-task Learning of Social Psychology Assessments and Nonverbal Features for Automatic Leadership Identification" (doi:10.1145/3136755.3136812).

• 25th ACM Multimedia (ACMMM 2017) in Mountain View, USA, with the article "Moving as a Leader: Detecting Emergent Leadership in Small Groups Using Body Pose" (doi: 10.1145/3123266.3123404).

• 18th ACM International Conference on Multimodal Interaction (ACM ICMI 2016) in Tokyo, Japan, with the article "Detecting Emergent Leader in a Meeting Environment Using Nonverbal Visual Features Only" (doi:10.1145/2993148.2993175).

• Second Workshop on Advancements in Social Signal Processing for Multimodal Interaction 2016 (ASSP4MI2016) held at the 18th ACM International Conference on Multimodal Interaction (ACM ICMI 2016) in Tokyo, Japan, presenting the paper "Identification of Emergent Leaders in a Meeting Scenario Using Multiple Kernel Learning" (doi: 10.1145/3005467.3005469).

• 20th IEEE International Conference on Image Processing (IEEE ICIP 2013) in Melbourne, Australia, with the article "Detecting Abnormal Fish Trajectories Using Clustered and Labeled Data" (doi: 10.1109/ICIP.2013.6738303).

• 24th British Machine Vision Conference (BMVC 2013) in Bristol, United Kingdom, with the article "Detection of Abnormal Fish Trajectories Using a Clustering Based Hierarchical Classifier" (doi:10.5244/C.27.21).

• SPIE Defense, Security, and Sensing 2010 in Orlando, USA, with the article "Mean-Shift Tracking for Surveillance Applications Using Thermal and Visible Band Data Fusion" (doi: 10.1117/12.882838).

• 3rd International Symposium on Health Informatics and Bioinformatics (HIBIT) 2008 in Istanbul, Turkey, with the article "A Fuzzy k-NN Approach for Cancer Diagnosis with Microarray Gene Expression Data."

The invited speaker at the following events

• Seminar at the Department of Management, Information and Production Engineering, University of Bergamo. Title of the talk: "Unlocking Computer Vision for Automated Behavior Understanding." Date: 03/10/2023.

• Seminar at the Department of Science and Technological Innovation, University of Eastern Piedmont. Title of the talk: "Bridging The Gap Between Target Detection and Socially-Aware Behavior Analysis." Date: 12/07/2023.

• Seminar at the Department of Computer Science, University of Verona. Title of the talk: "On the Way of Automated Behavior Understanding: From Target Detection to Socially-Aware Behavior Analysis." Date: 20/06/2023.

• Seminar at the Department of Computer Science, Ankara Yıldırım Beyazıt University, Turkey. Title of the talk: "Recent Advances in Automatic Human Behavior Understanding." Date: 03/05/2023.

• Seminar for the course Nonverbal Behavior and Interaction (Master's in Human-Computer Interaction, University of Trento). Title of the talk: "Machine Learning for Human Behavior Understanding." Date: 18/11/2022.

• Seminar at the Department of Information Engineering and Computer Science, University of Trento. Title of the talk: "Investigation of Social Interactions through Visual Data Analysis." Date: 14/10/2020.

• Seminar for the course Multimedia Informatics - Research Methods at Middle East Technical University, Ankara, Turkey. Title of the talk: "Social Signal Processing Approaches." Date: 27/12/2017.

AWARDS AND RECOGNITIONS

The winner of the competition for 'Fixed-term Researcher, art. 24, paragraph 3, letter B, Law 240/2010' at the University of Bergamo, Department of Management, Information, and Production Engineering (30/06/2023).

The winner of the competition for 'Fixed-term Researcher, art. 24, paragraph 3, letter B, Law 240/2010' at the University of Eastern Piedmont, Department of Science and Technological Innovation (26/06/2023). *The position was declined.*

Ego4D challenge winner at the "Joint International 3rd Ego4D and 11th EPIC Workshop" held during the IEEE International Conference on Computer Vision and Pattern Recognition (CVPR) 2023: 1st place in the 'Ego4D Challenge Forecasting' in the 'Short-term hand object prediction' category (19/06/2023). https://sites.google.com/view/ego4d-epic-cvpr2023-workshop/?pli=1 https://ego4d-data.org/workshops/cvpr23/#
This study was also presented at the Synapse AI Symposium on 30/09/2023. https://synapsesymposium.ai/

Recognition as a member of ELLIS (European Laboratory for Learning and Intelligent Systems) on 20/06/2022. https://ellis.eu/members

Selected as "**Outstanding Reviewer**" at IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR) 2022 (20/06/2022).

Winner of the competition for "Fixed-term Researcher, Art. 24, Paragraph 3, Letter A of Law 240/2010" at the University of Trento, Department of Engineering and Information Science.

UK Higher Education Academy (HEA) Associate Fellowship (20/06/2022). This recognition was awarded for achievements in higher education in line with the UK Professional Standards Framework, granted by the UK Higher Education Academy (HEA). The recognition confirms the candidate's knowledge of teaching methodologies and teaching experience (including support activities such as tutoring, demonstrating, and marking) in university courses in the UK and abroad. More details can be found at: https://www.advance-he.ac.uk/fellowship/associate-fellowship .

Best Thesis Award for Master of Science Thesis in 2011, granted by the "Prof. Dr. Mustafa N. Parlar Education and Research Foundation" at Middle East Technical University (METU), Ankara, Turkey. The award was received in June 2012. https://parlar.org.tr/

Best Thesis Award among all Master's and Ph.D. theses for the academic year 2010-2011, awarded by Middle East Technical University (METU), Ankara, Turkey. The award was received on 30/05/2012. https://ii.metu.edu.tr/graduate-awards

Recipient of the "Edinburgh Global Overseas Research Scholarship" for doctoral research at the University of Edinburgh (Edinburgh, United Kingdom) from 01/09/2011 to 31/08/2014.

Recipient of the "Principal Career Development Scholarship" for doctoral research at the University of Edinburgh (Edinburgh, United Kingdom) from 01/09/2011 to 31/08/2014.

Awarded the "Best Student Paper Award, 1st place" at the 19th IEEE Conference on Signal Processing and Communications Applications (SIU 2011) for the paper titled "Görünür ve Termal Bant Takibi Kullanilarak Terk Edilmis Nesne Tespiti" (original title) and "Detection of Abandoned Objects Using Thermal and Visible Band Tracking" (English title). Received on 22/04/2011.

Recognized as the second-best graduate student in Computer Engineering for the academic year 2007/2008, awarded by Baskent University, Ankara, Turkey. Recognition was received in June 2008.

Awarded a travel grant for students to attend the SPIE Defense, Security, and Sensing Symposium in April 2011.

Recipient of the academic merit scholarship for the academic year 2007-2008 at Baskent University, Cum Laude (GPA: 3.72/4.00).

Recipient of the academic merit scholarship for the academic year 2006-2007 at Baskent University, Cum Laude (GPA: 3.73/4.00).

EDITORIAL BOARD MEMBER OF THE INTERNATIONAL JOURNAL

• [Ongoing Activity] Journal of Marine Science (ICES JMS, impact factor: 3.9, SJR: Q1) (https://academic.oup.com/icesjms/pages/Editorial_Board) Editorial Board Member responsible for publications on computer vision, machine learning, and artificial intelligence applications in marine sciences. Activity started on 01/09/2018. The editorial responsibilities include managing approximately 20 articles per year. Additionally, Cigdem Beyan proposed and managed a collection of articles (Special Issue) on machine learning applications: "Applications of Machine Learning and Artificial Intelligence in Marine Science," in collaboration with Howard I. Browman (Editor-in-chief of the ICES Journal of Marine Science) (March 2019 - August 2020) (https://academic.oup.com/icesjms/article/77/4/1267/5873749).

• Guest Editor with Yiming Wang (Bruno Kessler Foundation, Italy), Prof. Fei Chen (The Chinese University of Hong Kong, Hong Kong), Séverin Lemaignan (PAL Robotics, Spain), Elisa Ricci (University of Verona, Italy), and Alessandra Sciutti (Italian Institute of Technology, Italy) for a collection of articles (Special Issue) titled "Social and Cognitive Interactions in the Open World" for the journal "International Journal of Social Robotics (SJR: Q1)" (https://www.springer.com/journal/12369/updates/24073292) (March 2023 - August 2024).

• Guest Editor with Prof. Vittorio Murino (Italian Institute of Technology, University of Verona, Huawei Technologies, Ireland), Prof. Gentiane Venture (Tokyo University of Agriculture and Technology, Japan), and Prof. Agnieszka Wykowska (Italian Institute of Technology, Italy) for a collection of articles (Research Topic) titled "Computational Approaches for Human-Human and Human-Robot Social Interactions" for the journal "Frontiers in Robotics and AI (SJR: Q2)" (https://www.frontiersin.org/research-topics/8447/computational-approaches-for-human-human-and-human-robot-social-interactions) (January 2019 - April 2020).

ORGANIZATION OF THE INTERNATIONAL CONFERENCE

• Doctoral Consortium Co-chair at the 18th European Conference on Computer Vision (ECCV 2024) https://eccv2024.ecva.net/Conferences/2024/Committees

• Social Media Co-chair at the 33rd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2024) https://www.ro-man2024.org/overview/organizingcommittee

• Publicity Co-chair at the 20th IEEE International Conference on Advanced Robotics and its Social Impacts 2024 (IEEE ARSO 2024) https://ieee-arso.org/organization/

• Proceedings Co-chair at the 17th International Conference on Advanced Visual Interfaces (AVI 2024) https://avi2024.dibris.unige.it/committees

• Demo and Exhibition Chair at the 18th IEEE International Conference on Automatic Face and Gesture Recognition (IEEE FG 2024) https://fg2024.ieee-biometrics.org/

AREA CHAIR (MEMBER OF THE SENIOR COMMITTEE) OF THE INTERNATIONAL CONFERENCE

• IEEE International Conference on Robotics and Automation (ICRA) 2025, Atlanta, Stati Uniti d'America.
• 35th British Machine Vision Conference (BMVC) 2024, Glasgow, Regno Unito.
• 12th International Conference on Affective Computing & Intelligent Interaction (ACII) 2024, Glasgow, Regno Unito. https://acii-conf.net/2024/people/senior-program-committee/
• 26th ACM International Conference on Multimodal Interaction (ACM ICMI) 2024, San José, Costa Rica.
• 18th European Conference on Computer (ECCV) 2024, Milano, Italia.
https://eccv.ecva.net/Conferences/2024/AreaChairs
• IEEE International Conference on Robotics and Automation (ICRA) 2024, Yokohama, Japan.
• 34th British Machine Vision Conference (BMVC) 2023, Aberdeen, Regno Unito.
https://bmvc2023.org/people/area-chairs/
• 33th British Machine Vision Conference (BMVC) 2022, Londra, Regno Unito.
https://bmvc2022.org/people/area-chairs/
• 24th ACM International Conference on Multimodal Interaction (ACM ICMI) 2022, Bangalore, India.
https://icmi.acm.org/2022/people/
• 32nd British Machine Vision Conference (BMVC) 2021.
https://www.bmvc2021-virtualconference.com/people/area-chairs/

SESSION CHAIR OF THE INTERNATIONAL CONFERENCE

• Social Signal Processing Breakout Discussion Session at the 22nd ACM International Conference on Multimodal Interaction (ACM ICMI) 2020. Date of the event: 27/10/2020.

MEMBER OF THE PROGRAM COMMITTEES AND/OR TECHNICAL COMMITTEES OF INTERNATIONAL CONFERENCES

• ACM International Conference on Multimedia (ACM MM) 2019, 2020, 2021, 2022, 2024
• ACM International Conference on Multimodal Interaction (ACM ICMI) 2019, 2020, 2021
• International Conference on Human-Computer Interaction Theory and Applications (HUCAPP) 2019, 2020, 2021, 2022
• Doctoral Consortium of the Int. Conf. on Affective Computing and Intelligent Interaction (ACII) 2019, 2024
• First Multimodal Banquet: Exploring Innovative Technology for Commensality and Human-Food Interaction (CoFI2024) ICMI 2024 https://cofi2024.github.io/committees.html
• International Workshop on Corpora And Tools for Social skills annotation @ICMI2021
https://sites.google.com/view/cats2021workshop/people?authuser=0

REVIEWER FOR INTERNATIONAL CONFERENCES

- Conference on Neural Information Processing Systems (NeurIPS) 2022, 2024
- IEEE / CVF Computer Vision and Pattern Recognition (CVPR) 2022, 2023, 2024
- European Conference on Computer Vision (ECCV) 2020
- International Conference on Computer Vision (ICCV) 2023
- ACM International Conference on Multimedia (ACM MM) 2019, 2020, 2021, 2022, 2024
- International Conference on Machine Learning (ICML) 2022, 2023
- International Conference on Learning Representations (ICLR) 2022, 2024
- IEEE / RSJ International Conference on Intelligent Robots and Systems (IROS) 2022, 2023
- ACM International Conference on Multimodal Interaction (ACM ICMI) 2019, 2020, 2021
- IEEE / CVF Winter Conference on Applications of Computer Vision (WACV) 2021, 2023
- ACM / IEEE International Conference on Human-Robot Interaction (HRI) 2023
- International Conference on Pattern Recognition (ICPR) 2014, 2016, 2018, 2020
- International Conference on Affective Computing and Intelligent Interaction (ACII) 2019, 2021
- ACM / IEEE International Conference on Human-Robot Interaction (HRI) 2023
- International Conference on Image Analysis and Processing (ICIAP) 2021
- International Conference on Motion and Computing (MOCO) 2018, 2020
- ECCV Workshop on Multimodal Learning and Applications (MULA) 2018
- ICCV Workshop on Action Recognition with a Large Number of Classes (THUMOS) 2013

REVIEWER FOR INTERNATIONAL JOURNALS

- IEEE Transactions on Pattern Analysis and Machine Intelligence
- IEEE Transactions on Multimedia
- IEEE Transactions on Affective Computing
- IEEE Transactions on Knowledge and Data Engineering
- IEEE Transactions on Cognitive and Developmental Systems
- International Journal of Computer Vision
- Pattern Recognition
- Computer Vision and Image Understanding
- Machine Vision and Applications
- International Journal of Social Robotics
- Multimedia Systems
- IEEE Access
- PLOS ONE
- IET Image Processing
- Expert Systems with Applications
- EURASIP Journal on Image and Video Processing
- ICES Journal of Marine Science
- Frontiers Psychology
- Electronics Letters
- IEEE Robotics and Automation Letters

REVIEWER OF RESEARCH FUNDING PROPOSALS

- Grant Provider: National Science Centre Poland, Funding Scheme: OPUS-26, Proposal Title: "Adapting Visual Generative Models for Pattern Discovery and Data Manipulation" (review submission date: 13/03/2024).

EXTERNAL EVALUATOR OF DOCTORAL THESES AND PARTICIPATION IN DOCTORAL COMMITTEES

• [Ongoing Activity] Yasin Yari, "Machine Learning and Ultrasound for Smart Monitoring of the Maturation State in Atlantic Salmon," Norwegian University of Science and Technology, Trondheim, Norway (discussion date: 10/10/2024).

• Nicola Webb, "From Simulation to Real-World: Measuring Social Engagement for Social Robots," University of the West of England, Bristol, United Kingdom (discussion date: 01/08/2024).

• Muhammad Najam Dar, "Deep Learning based Emotion Charting for Healthy and Cognitively Impaired Subjects using Physiological Signals," National University of Sciences and Technology (NUST), Pakistan (discussion date: 08/12/2022).

THE ORGANIZER OF THE WORKSHOP

The main organizer of the Workshop on Social and Cognitive Interactions for Assistive Robotics (SCIAR) as part of the 2022 IEEE/RSI International Conference on Intelligent Robots and Systems (IROS 2022), Kyoto, Japan. The event date: 27/10/2022. The workshop website: https://sciar-workshop.github.io/

Member of the organizing committee of the 2nd Workshop on Applications of Egocentric Vision (EgoApp) held during the 25th International Conference on Pattern Recognition (ICPR) 2020 (Milan, Italy). The event date: 10/01/2021. The workshop website: https://egoappworkshop2020.wordpress.com/ .

Member of the organizing committee of the Applications of Egocentric Vision Workshop (EgoApp) held during the 30th British Machine Vision Conference (BMVC 2019) in Cardiff, United Kingdom. The event date: 12/09/2019. The workshop website is https://egoappworkshop.wordpress.com/.

THESIS AND INTERNSHIP SUPERVISOR

Ph.D. Thesis Supervisor

[Ongoing Activity] Co-supervisor of Francesco Tonini alongside Prof. Elisa Ricci (University of Trento) and Cees Snoek (University of Amsterdam). Start date: 22/11/2020.

From 04/11/2020 to 29/04/2024, co-supervisor of Sanket Kumar Thakur together with Alessio Del Bue, Pietro Morerio, and Prof. Vittorio Murino (Italian Institute of Technology, Genoa). Title of the thesis: "Social-Physical Interaction Analysis for Egocentric Videos." To view the thesis: https://iris.unige.it/handle/11567/1168815

From 12/11/2019 to 27/03/2023, co-supervisor of Giancarlo Paoletti together with Alessio Del Bue (Italian Institute of Technology, Genoa). The title of the thesis: "Unsupervised Human Action Recognition Using 3D Skeleton Poses." To view the thesis: https://iris.unige.it/handle/11567/1109462

From 14/11/2017 to 05/03/2021, co-supervisor of Muhammad Shahid together with Prof. Vittorio Murino (Italian Institute of Technology, Genoa). The title of the thesis: "Social Interactions Analysis through Deep Visual Nonverbal Features." To view the thesis: https://iris.unige.it/handle/11567/1040976

From 01/11/2015 to 19/02/2019, co-supervisor of Nicolò Carissimi together with Prof. Vittorio Murino (Italian Institute of Technology, Genoa). The title of the thesis: "Investigating Social Interactions Using Multi-Modal Nonverbal Features." To view the thesis: https://iris.unige.it/handle/11567/940931

Master's Thesis Supervisor

Supervisor of the Master's thesis in Computer Science by Andrea Appiani at the University of Bergamo. The title of the thesis is: "Analysis of the Effectiveness of Vision Language Models for Visual Voice Activity Detection." Activity period: 13/09/2023 – 27/03/2024.

Co-supervisor, along with Prof. Nicu Sebe and Francesco Tonini, of the Master's thesis in Human-Computer Interaction by Gianmarco Antignani at the University of Trento. The title of the thesis is: "Measuring the Engagement in Human-Robot Interaction Using Computer Vision and Machine Learning." Activity period: 15/02/2023 – 04/03/2024.

Supervisor of the Master's thesis in Artificial Intelligence Systems by Noemi Canovi at the University of Trento. The title of the thesis is: "Fish Behavior Classification through Trajectory-based Generative Model Pretraining." Activity period: 30/04/2023 – 14/12/2023. To see the thesis: https://webapps.unitn.it/Biblioteca/it/Web/TesiDocente/195573

Co-supervisor, along with Prof. Elisa Ricci and Federica Arrigoni, of the Master's thesis in Mathematics by Martina Rama at the University of Trento. The title of the thesis is: "Automatic Social Group Matching in Dynamic Crowded Environments." Activity period: 20/03/2022 - 21/10/2022. To see the thesis: https://webapps.unitn.it/Biblioteca/it/Web/TesiDocente/195573

Co-supervisor, along with Prof. Nicu Sebe and Prof. Radoslaw Niewiadomski, of the Bachelor's thesis in Computer Engineering, Communications, and Electronics by Federico Montagna at the University of Trento. The title of the thesis is: "Automatic Gestures Styles Analysis from Videos." Activity period: 20/01/2022 - 14/09/2022.

Co-supervisor, along with Prof. Elisa Ricci, of the Master's thesis in Computer Science by Francesco Tonini at the University of Trento. The title of the thesis is: "I Know Where You Are Looking: Detecting People's Gaze with a Multimodal Approach." Activity period: 01/09/2021 - 01/03/2022. Per vedere la tesi: https://webapps.unitn.it/Biblioteca/it/Web/TesiDocente/195573

Internship Supervisor

Supervisor of the internship for Kheder Yazgi. The title of the activity is "Modeling of Commensal Activities of Individuals and Groups" at the University of Trento. Activity period: 16/03/2023 - 16/06/2023.

Supervisor of the internship for Noemi Canovi. The title of the activity is "Analysis of Fish Behavior Using Deep Learning" at the University of Trento. Activity period: 23/03/2023 - 30/04/2023.

Supervisor of the internship for Martina Rama. The title of the activity is "Study and Implementation of Solutions for Analyzing Nonverbal Human Behaviors and Deducing Relevant Social/Emotional Patterns" at the University of Trento. Activity period: 04/10/2021 - 20/03/2022.

PUBLICATIONS

Editorial activity (2)

[E02] **C. Beyan** and H. I. Browman, "Setting the stage for the machine intelligence era in marine science", ICES Journal of Marine Science, Volume 77, Issue 4, pp. 1267–1273, July-August 2020.
doi: 10.1093/icesjms/fsaa084
(SJR: Q1)

[E01] **C. Beyan**, V. Murino, G. Venture and A. Wykowska, "Editorial: Computational Approaches for Human-Human and Human-Robot Social Interactions", Frontiers in Robotics and AI, vol. 7, no. 55, 2020.

doi: 10.3389/frobt.2020.00055
(SJR: Q2)

Book chapters (3)

[B03] **C. Beyan**, "Unusual Trajectory Detection: Advances", In Encyclopedia of Image Processing, 1st Edition, Phillip A. Laplante (Editor), Taylor & Francis Group: New York, pp: 766-781.
doi: 10.1201/9781351110273-140000116
url:
https://books.google.it/books?hl=en&lr=&id=jIqADwAAQBAJ&oi=fnd&pg=PP1&ots=b5PMSYAnrU&sig=2TgoqTo6iwDgoOOkAka5BJdve7g&redir_esc=y#v=onepage&q&f=false

[B02] **C. Beyan**, "Fish Behavior Analysis", In Fish4Knowledge: Collecting and Analyzing Massive Coral Reef Fish Video Data, Chen-Burger et al. (Editors), Springer.
doi: 10.1007/978-3-319-30208-9

[B01] **C. Beyan**, and R. B. Fisher, "Hierarchal Decomposition for Unusual Fish Trajectory Detection", In Computer Vision and Pattern Recognition in Environmental Informatics, Zhou et al. (Editors), IGI Global.
doi: 10.4018/978-1-4666-9435-4.ch001

Peer-reviewed international journals (22)

[IJ22] N. Canovi, B. Ellis, T. Sørdalen, V. Allken, K. Halvorsen, K. Malde, **C. Beyan**, "Trajectory-based fish event classification through pre-training with diffusion models", in Ecological Informatics, 2024.
doi: 10.1016/j.ecoinf.2024.102733
(SJR: Q1)

[J21] S. Thakur, **C. Beyan**, P. Morerio, V. Murino, A. Del Bue, "Anticipating Next Active Objects for Egocentric Videos", in IEEE Access, Volume 12, pp. 61767-61779, 2024.
doi: 10.1109/ACCESS.2023.0322000
(SJR: Q1)

[J20] **C. Beyan,** A. Vinciarelli, and A. Del Bue, "Co-Located Human-Human Interaction Analysis using Nonverbal Cues: A Survey", in ACM Computing Surveys, Volume 56, Issue: 5, pp. 1-41 2023.
doi: 10.1145/3626516, url: https://dl.acm.org/doi/10.1145/3626516.
(SJR: Q1)

[J19] M. D'inca*, **C. Beyan***, R. Niewiadomski, S. Barattin, and N. Sebe, "Unleashing the Transferability Power of Unsupervised Pre-Training for Emotion Recognition in Masked and Unmasked Facial Images", in IEEE Access, Volume 11, pp. 90876-90890, 2023.
doi: 10.1109/ACCESS.2023.3308047
(SJR: Q1)
* indica uguale contributo

[J18] G. Paoletti, **C. Beyan** and A. Del Bue, " SKELTER: Unsupervised Skeleton Action Denoising and Recognition using Transformers," in Frontiers in Computer Science, Section Computer Vision, Volume 5, 2023.
doi: 10.3389/fcomp.2023.1203901
(SJR: Q2)

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