

# Curriculum Vitae, Enver Sangineto, Ph.D.

## PROFILE

Currently Assistant Professor (“Ricercatore Universitario a Tempo Determinato tipo B (RUTD-B)”) in the Department of Engineering “Dipartimento di Ingegneria Enzo Ferrari” (DIEF) of the University of Modena and Reggio Emilia (Italy). Ph.D. graduate in Computer Engineering with a Computer Vision Thesis in 2001. I have been working in *Computer Vision* research since my doctoral studies, both in private companies and in public or private research centers and academic laboratories.

My main research interest is Deep Learning (for both vision and non-vision tasks) with minimal human supervision, where networks are trained with no or very few annotations. I am interested in both discriminative and generative methods, and I am currently working on different topics: *Image Captioning, Vision-Language Models, Self-Supervised Learning, Image Generation, Novel Class Discovery, Few-Shot Learning, Domain Adaptation, Continual Learning, Optimization and Meta-Optimization for Deep Networks*.

In the past, I have been working on other Deep Learning/Computer Vision topics, such as: Autonomous Driving, Weakly-Supervised Object Detection, Anomaly Detection, Transfer Learning, Tampered Image Recognition, Action Recognition, Facial Expression Recognition, Pedestrian Detection, Content-Based Image Retrieval, Vision Guided Robot Navigation, Facial Landmark Localization, People and Vehicle Counting and many others.

My interests span the whole AI area, and I have been actively working also on fields different from Vision. For instance, in 2019 I joined the Backup project, working on both Neuromorphing Computing and Human-Brain Interfaces. During my doctoral studies and in the years immediately following, I worked in Symbolic AI (Formal Logics, Problem Solving, Knowledge Representation and AI in Education) and in Human-Computer Interaction (user customization and gesture-based interfaces).

## PERSONAL DATA

Place and date of birth: Cassano allo Ionio (Italy), 27/04/1972

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Personal Page: <https://disi.unitn.it/~enver.sangineto/index.html>

Languages: Italian (mother tongue), English (fluent).

## EDUCATION

**Dec 1995:** "Laurea" in Computer Science at the University of Pisa, Italy, defending the thesis: "Diplomacy in FOL: Il metaragionamento applicato alla diplomazia" (Diplomacy in First Order Logic: meta-reasoning applied to diplomacy). Rating: 105/110. Advisors: Maria Simi and Gianfranco Prini, both Professors of Artificial Intelligence, Computer Science Dept., Science Faculty of the University of Pisa.

**Feb 2001:** Ph.D. in Computer Engineering at the University of Rome “La Sapienza”, defending the thesis “Classificazione di immagini tramite astrazione geometrica” (Automatic

Image Classification through Geometric Abstraction). Advisor: Luigia Carlucci Aiello, Prof. of Artificial Intelligence, Engineering Faculty of the University of Rome “La Sapienza”.

## **WORK HISTORY**

**March 2001 - August 2001:** “Research assistant” in the DIA Artificial Intelligence Laboratory of the University of Rome “Roma Tre”.

**July 2001 - July 2006:** “Senior researcher” in the jointly public and private research center “Centro di Ricerca in Matematica Pura e Applicata” (CRMPA, Salerno, Italy), in its Roman branch hosted at the DIA Lab. in “Roma Tre”. The research activity in this period mainly focused on e-learning and Human-Computer Interaction (user customization), and it was done in three different European funded projects: “m-learning”, “Diogene” and “Kaleidoscope”. Specifically, I was both the general technical manager and the project general co-manager of Diogene (project number: IST-2001-33358), dealing with both technical and management aspects. This project was composed of 8 different European partners with a budget of about 2.6 million Euros and I was in charge of both the overall scientific methodology formulation and the managerial activity coordination.

**April 2005 - December 2010:** Consultant for two private Italian companies (Hypercube Technologies S. a. s. and T.M.T. Pragma, <http://www.tmtpragma.it/>). I was the scientific head of a project on video-based vehicle and people counting system for indoor and outdoor statistical analysis.

**May 2005 - April 2006:** One-year Post-Doc position at the University of Salerno, Italy, working on e-learning and Human-Computer Interaction (user customization).

**July 2006 - June 2010:** Post-Doc researcher at the University of Rome “La Sapienza”, working on Computer Vision and Human-Computer Interaction (gesture-based interfaces).

**July 2007 - May 2011:** In this period, I have been working also as a consultant for the jointly public and private research center “Consorzio Centro di Eccellenza su Metodi e Sistemi per Aziende Competitive” (CEMSAC, Salerno, Italy, associated with CRMPA).

**September 2007 - October 2007:** Visitor of the “Intelligent Systems Lab” of the University van Amsterdam hosted by Professor Nicu Sebe.

**June 2011 - November 2013:** “Senior researcher” in the Italian Institute of Technology (IIT), Genova, Italy. Main topics: Transfer learning, Pedestrian Detection and Abnormal Crowd Behaviour Detection.

**December 2013 - October 2018:** Senior Post-Doc researcher in the Department of Information Engineering and Computer Science (DISI) of the University of Trento (Italy). Main topics: Deep Learning, Transfer learning, Object Detection, Video Analysis, Facial Expression Recognition.

**July 2014 - October 2014:** Visitor of the “Center for Research in Computer Vision” at University of Central Florida (UCF), Orlando, hosted by Professor Mubarak Shah. The visiting period was partially funded by UCF.

**March 2018 - July 2019:** Principal Investigator (PI) and scientific manager of the “End-to-end Learning for Self-Driving Cars” project, an industrial project in a joint-collaboration DISI-Magneti Marelli.

**November 2018 – December 2021:** Assistant Professor in the Department of Information Engineering and Computer Science (DISI) of the University of Trento (Italy).

**January 2022 – Present:** Assistant Professor in the Department of Engineering (DIEF) of the University of Modena and Reggio Emilia (Italy).

## **ORGANIZATIONAL AND EDITORIAL ACTIVITIES**

- Membership in scientific committees:

- Member of the Steering Committee of the Special Interest Group (SIG) *Artificial Intelligence and Education (AIED SIG)* for the European project Kaleidoscope (Project No. 507838).
- Member of the Steering Committee of the *Semantic Web and E-Learning JEIRP* for the European project Kaleidoscope (Project No. 507838).
- Member of the Program Committee of the *Second International Workshop Semantic Web for Web-based Learning (SW-WL'05). Implications in the area of Information Systems in Education*, in conjunction with the *12th Int. Conf. on Artificial Intelligence in Education, AIED 2005*, Amsterdam, July 18, 2005.
- Member of the Technical Program Committee of the *First Workshop on 3D Face Alignment in the Wild*, in conjunction with the *14th European Conference on Computer Vision (ECCV)*, Amsterdam, October 11-14, 2016.
- Member of the Technical Program Committee *Understanding - Multimedia and Vision*, in conjunction with the *25th ACM Multimedia Conference (ACM MM)*, Mountain View, CA USA, October 23-27, 2017.
- Member of the Program Committee of the *1st Workshop on Vision for Interaction and Behaviour understanding (VIBE 2018)*, in association with *BMVC 2018*, Newcastle upon Tyne, UK - September 6, 2018.
- Member of the Program Committee of the *Workshop Shortcomings of Vision and Language (SiVL 2019)*, in association with *NAACL-HLT 2019*, Minneapolis, USA, June, 2019.
- Member of the Program Committee of the *1st International Workshop on Virtual Reality and Artificial Intelligence in Medical Applications (VRAIMA 2019)*, Valencia, Spain, June 18-21, 2019.
- Member of the Technical Program Committee of the *20th International Conference on Image Analysis and Processing (ICIAP 2019)*, Trento, Italy, September 9-13, 2019.
- Member of the Technical Program Committee of the *10th ICCV Workshop on Human Behaviour Understanding (HBU)*, in conjunction with *ICCV 2019*, Seoul, Korea, October 27-November 2, 2019.
- Member of the Program Committee of the *15th International Conference on Computer Vision Theory and Applications" (VISAPP 2020)*, Valletta, Malta, February 27-29, 2020.
- Referee for different international Journals and Conferences, such as, for example: IEEE Transaction on PAMI, Pattern Recognition, IEEE Transaction on MultiMedia, International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI), International Journal of Robotics and Automation, Image and Vision Computing (IMAVIS), IEEE Transaction on Image Processing, Journal of Visual Languages and Computing, Journal of Multimedia, AIED, ICPR, ECCV, CVPR, ICIP, ICCV, BMVC, ICMR, ICIAP, ACM MM and many others in both the e-learning and the computer vision field.
- Associate Editor of the *Machine Vision and Application (MVAP)* journal (Springer). December 2019-Present.
- Area Chair of the *25th Int. Conf. on Pattern Recognition (ICPR) 2020*.
- Chair of the Oral Session "Image Processing and Segmentation", *25th Int. Conf. on Pattern Recognition (ICPR) 2020*.
- Area Chair of the *26th Int. Conf. on Pattern Recognition (ICPR) 2022*.
- Member of the Editorial Board of the *Machine Learning* journal (Springer). July 2020-Present.
- AAAI-22 Senior Program Committee Member.

## PATENTS

- Co-Inventor of the Patent: “Combining command-conditioned policies and scene-dynamics modeling for autonomous driving” in Collaboration with Magneti Marelli (under review).
- Co-Inventor of the Patent: “Online Continual Learning under Extreme Memory Constraints” in Collaboration with SAP AI Research, Berlin, Germany (under review).

## HONORS and AWARDS

- *Best-student poster prize, first place, at Google Research NY Multimedia and Vision Meeting, October 3rd, 2014, New York*  
E. Sangineto, G. Zen, E. Ricci, N. Sebe, We are not All Equal: Personalizing Models for Facial Expression Analysis with Transductive Parameter Transfer, *ACM Multimedia (ACM MM)*, Orlando, Florida, November 3-7, 2014.
- *Best-student paper, second place, at ICIP 2017*  
M. Ravanbakhsh, M. Nabi, E. Sangineto, L. Marcenaro, C. Regazzoni and N. Sebe, Abnormal Event Detection in Videos using Generative Adversarial Nets, *IEEE Intern. Conference on Image Processing (ICIP)* 2017
- **Italian Habilitation** as Associate Professor of *Computer Science* (01/B1– ASN 2018-2020) and *Computer Engineering and Information Processing Systems* (09/H1– ASN 2018-2020)

## SCIENTIFIC PROJECTS

- E-learning projects:
  - m-learning (European project No. IST-2000-25270) (period: 01/10/2001-31/10/2003). Role: *WP Leader*.
  - Diogene (European project No. IST-2001-33358) (period: 22/04/2002-22/10/2004). Role: *general technical manager and project general co-manager*.
  - Kaleidoscope (European project No. IST-507838) (period: 01/09/2004-30/06/2005). Role: *WP Leader*.
- Computer vision:
  - CHAT (Italian project, funded by M.I.U.R.)
  - Ambienti Intelligenti (Italian project, funded by M.I.U.R.)
  - CASHMA (Italian project, funded by M.I.U.R.)
  - Ciclope (Italian industrial project funded by two private companies: Hypercube Technologies and T.M.T. Pragma). Role: *Scientific Leader*.
  - AVICS (Italian industrial project funded by a private company: T.M.T. Pragma). Role: *Scientific Leader*.
  - Crowd Behavior Analysis (Italian industrial project, a joint collaboration between IIT and Selex-Elsag). Role: *WP Leader*.
  - ACANTO (European project No. H2020-PHC-19-2014)
  - Xlime (European project ID: 611346)
  - Dali (European project ID: 288917)
  - End-to-end Learning for Self-Driving Cars (Italian industrial project, a joint collaboration between DISI and Magneti Marelli). Role: *Principal Investigator (PI) and general scientific manager*

- CLEVER: automatic glass defect detection (Italian industrial project, a joint collaboration between DISI and DeltaMax). Role: *scientific leader* of the Deep Learning part.
- OLIVER: Open-Ended Learning for Interactive Robots (EUREGIO IPN, 2019-2022). Role: *WP Leader*.
- SPRING: Socially Pertinent Robots in Gerontological Healthcare (European project UE H2020 “SPRING”).
- Machine-learning:
  - Backup: Neuromorphic Computing and Brain-signal Reconstruction (ERC H2020 Grant agreement No 788793-BACKUP , <https://r1.unitn.it/back-up/>). Role: *WP Leader*.
  - PELM: Photonic Extreme Learning Machine (<https://r1.unitn.it/pelm/>)

## TEACHING

- Teacher Assistant in the *Basic Programming* course for Aerospace Engineering, held by Prof. Marco Cadoli, Engineering Faculty of the University of Rome “La Sapienza”. Period: 1998-1999.
- Lessons on Computer Vision as part of the following courses:
  - Course of *Artificial Intelligence* for Computer Engineering, held by Prof. Alessandro Micarelli, Engineering Faculty of the University of Rome “Roma Tre”. Period: 2001-2006.
  - Courses of *Elaboration Systems* and *Information Systems’ Design* for Computer Engineering, both held by Prof. Riccardo Torlone, Engineering Faculty of the University of Rome “Roma Tre”. Period: 2001-2006.
- Lessons on Knowledge Representation, Semantic Web, and Introduction to Logic as part of the Ph.D. course “Sistemi Industriali Complessi” (complex industrial systems), University of Rome “Roma Tre”, organized by Prof. Fabio Carassiti, 2005.
- Teacher Assistant in the *Operating Systems* course held by Prof. Federico Massaioli, Computer Science Department of the University of Rome “La Sapienza”. Period: 2006-2011.
- Referee of tens of master/bachelor theses in Computer Science, the most of which on Computer Vision topics.
- Advisor or co-advisor of more than 30 master/bachelor theses, all concerning Computer Vision/Machine Learning research problems.
- Supervisor of tens of Ph.D. students and Post-Docs (University of Rome “La Sapienza”, IIT, University of Trento).
- Author of some didactic material of the aforementioned Computer Vision lessons. Co-author of an exercise-book for the aforementioned Operating System course (please, see the Publications section, paragraph: “Other publications”).
- Invited tutorial lesson in the Computer Vision summer school “La Visione delle Macchine” (VISMACH 08), organized by the Italian Pattern Recognition group (GIRPR) during summer 2008 (Pavia, September 2008).
- Lessons on Image Retrieval topics as part of the University course *Information Extraction from Web*, held by Professor Paola Velardi. Period: 2008-2010.
- Lessons on Human-Computer Interaction as part of the University course *Systems for local and remote interaction*, held by Professors: P. Bottoni, A. Labella and S. Levialdi. Period: 2008.
- Lessons on Computer Vision topics as part of the courses *Image Processing* and *Artificial Vision*, both held by Professor Luigi Cinque. Period: 2006-2011.

- Lesson on Machine Learning as part of the Ph.D. course *Machine Learning and Computer Vision*, Italian Institute of Technology, organized by Prof. Vittorio Murino, November 2013.
- Teacher of the Ph.D. course *Deep Learning*, DISI, University of Trento, March-April 2016, jointly with Prof. Paolo Frasconi (<http://webdisi.disi.unitn.it/kee3koh3iev4/program/courses/31008-deep-learning.html>). I organized and supervised the course together with Frasconi, I held half of the lessons (10 out of 20 hours) and all the exams.
- Lessons on Object Detection, Object Tracking and Action Recognition in the private-company course: *Applied Deep Learning Workshop for Fujitsu*, London, March 2017.
- Teacher of the *Introduction to Machine Learning* course, Backup project (ERC Grant, <https://rl.unitn.it/back-up/>), Trento, February 4-18, 2019. Audience: Ph.D. students, Post-Docs and Professors at different levels. I organized and supervised the course and I held all the lessons.
- Teacher of the *Machine Learning* course for Computer Engineering, Engineering Faculty of the University of Modena and Reggio Emilia (“Sede di Mantova”), academic year: 2021/2022.

## OTHER SKILLS

Strong and long experience in writing European and Italian Project proposals, many of which have been accepted and funded.

Strong Python, C, C++ and Matlab developing skills. Strong background in PyTorch and Caffe (deep learning frameworks), familiarity with other deep learning frameworks (e.g., TensorFlow) and with the OpenCv toolkit.

## PUBLICATIONS

In my initial publications (published in Rome in the period before 2012), the order of the authors is usually *alphabetical*. This is the reason why, despite my main contribution in basically all those works, in the period before 2012, my name is not always first.

### *International Journals*

- Subhankar Roy, Aliaksandr Siarohin, Enver Sangineto, Nicu Sebe and Elisa Ricci, TriGAN: Image-to-Image Translation for Multi-Source Domain Adaptation, *Machine Vision and Applications*, 32 (41), 2021 (DOI: 10.1007/s00138-020-01164-4).
- A. Siarohin, S. Lathuilière, E. Sangineto and N. Sebe, Appearance and Pose-Conditioned Human Image Generation using Deformable GANs, *IEEE Transaction on Pattern Analysis and Machine Intelligence*, Vol. 43(4), pp. 1156-1171, 2021 (DOI: 10.1109/TPAMI.2019.2947427).
- Subhankar Roy, Enver Sangineto, Begum Demir and Nicu Sebe, Metric-Learning based Deep Hashing Network for Content Based Retrieval of Remote Sensing Images, *IEEE Geoscience and Remote Sensing Letters*, 2020 (DOI: 10.1109/LGRS.2020.2974629).

- Enver Sangineto, Moin Nabi, Dubravko Culibrk, Nicu Sebe, Self-Paced Deep Learning for Weakly Supervised Object Detection, *IEEE Transaction on Pattern Analysis and Machine Intelligence*, Vol. 41(3), pp. 712-725, March 2019.
- Gloria Zen, Lorenzo Porzi, Enver Sangineto, Elisa Ricci and Nicu Sebe, Learning Personalized Models for Facial Expression Analysis and Gesture Recognition, *IEEE Transaction on Multimedia*, Vol. 18(4), pp. 775-788, 2016.
- J. R. R. Uijlings, I. C. Duta, E. Sangineto, N. Sebe, Video classification with densely extracted HOG/HOF/MBH features: an evaluation of the accuracy/computational efficiency trade-off, *International Journal of Multimedia Information Retrieval*, Vol. 4(1), pp. 33-44, 2015.
- Enver Sangineto, Pose and Expression Independent Facial Landmark Localization Using Dense-SURF and the Hausdorff Distance, *IEEE Transaction on Pattern Analysis and Machine Intelligence*, Vol. 35(3), pp. 624-638, 2013.
- Enver Sangineto, Marco Cupelli, Real-time viewpoint-invariant hand localization with cluttered backgrounds, *Image and Vision Computing*, Vol. 30 (1), pp. 26-37, 2012.
- A. Ardovini, L. Cinque and E. Sangineto, Identifying Elephant Photos by Multi-Curve Matching, *Pattern Recognition*, Vol. 41(6), pp. 1867-1877, 2008.
- E. Sangineto, N. Capuano, M. Gaeta and A. Micarelli, Adaptive Course Generation through Learning Styles Representation, *International Journal of Universal Access in the Information Society*, Vol. 7(1-2), pp. 1-23, 2008.
- M. Anelli, L. Cinque and E. Sangineto, Deformation Tolerant Generalized Hough Transform for sketch-based image retrieval in complex scenes, *Image and Vision Computing*, Vol. 25(11), pp. 1802-1813, 2007.
- L. Cinque, E. Sangineto and S. Tanimoto, Recognition of articulated robots in the RoboCup domain, *International Journal of Machine Graphics and Vision (MGV)*. Vol. 15(3-4), *special issue on International Conference on Computer Vision and Graphics (ICCVG)*, pp. 311-320, 2006.
- E. Sangineto, An Abstract Representation of Geometric Knowledge For Object Classification, *Pattern Recognition Letters*, Vol. 24(9-10) pp. 1241-1250, 2003.

#### *International Book Chapters*

- R. Raghavendra, M. Cristani, A. Del Bue, E. Sangineto, V. Murino, Anomaly detection in crowded scenes: a novel framework based on Swarm Optimization and Social Force Modeling, in: *Modeling, Simulation and Visual Analysis of Large Crowds, A Multidisciplinary Perspective*, S. Ali, K. Nishino, D. Manocha, and M. Shah (Eds.), Vol. 11, Springer, 2013.



- E. Sangineto, An adaptive e-learning platform for personalized course generation, Claus Pahl (Ed.), *Architecture Solutions for E-Learning Systems*, Information Science Reference (IGI Global), USA, pp. 262-281, 2007. ISBN: 978-1-59904-633-4.
- E. Sangineto, Shape Based Image Retrieval by Alignment, Yu-Jin Zhang (Ed.), *Semantic-Based Visual Information Retrieval*, IRM Press (Idea Group), USA, pp. 46-67, 2007. ISBN: 1-59904-371-8.

### *International Conferences*

- Y. Liu, E. Sangineto, W. Bi, N. Sebe, B. Lepri, M. De Nadai, Efficient Training of Visual Transformers with Small Datasets, *Conference on Neural Information Processing Systems (NeurIPS)*, 2021.
- Enrico Fini, Enver Sangineto, Stéphane Lathuilière, Zhun Zhong, Moin Nabi, Elisa Ricci, A Unified Objective for Novel Class Discovery, *International Conference on Computer Vision (ICCV)* 2021. Oral paper.
- Aleksandr Ermolov, Aliaksandr Siarohin, Enver Sangineto, and Nicu Sebe, Whitening for Self-Supervised Representation Learning, *Thirty-eighth International Conference on Machine Learning (ICML)* 2021.
- Y. Liu, E. Sangineto, Y. Chen, L. Bao, H. Zhang, N. Sebe, B. Lepri, W. Wang, M. De Nadai, Smoothing the Disentangled Latent Style Space for Unsupervised Image-to-Image Translation, *Computer Vision and Pattern Recognition (CVPR)*, 2021.
- J. Chen, J. Zhang, E. Sangineto, T. Chen, J. Fan and Nicu Sebe, Coarse-to-Fine Gaze Redirection with Numerical and Pictorial Guidance, *IEEE Winter Conference on Applications of Computer Vision (WACV)* 2021.
- J. Zhang, J. Chen, H. Tang, W. Wang, Y. Yan, E. Sangineto, N. Sebe, A Dual In-painting Model for Unsupervised Gaze Correction and Animation in the Wild, *ACM Multimedia (ACM MM)* 2020.
- Enrico Fini, Stéphane Lathuilière, Enver Sangineto, Moin Nabi, Elisa Ricci, Online Continual Learning under Extreme Memory Constraints, *European Conference on Computer Vision (ECCV)*, 2020.
- Aleksandr Ermolov, Enver Sangineto and Nicu Sebe, Event Discovery for History Representation in Reinforcement Learning, 2020, Available at: <https://openreview.net/forum?id=H1eVlgHKPr>.
- S. Lathuilière, E. Sangineto, A. Siarohin, and N. Sebe, Attention-based Fusion for Multi-source Human Image Generation, *IEEE Winter Conference on Applications of Computer Vision (WACV)* 2020.
- Subhankar Roy, Aliaksandr Siarohin, Enver Sangineto, Samuel Rota Bulò, Nicu Sebe and Elisa Ricci, Unsupervised Domain Adaptation using Feature-Whitening and Consensus Loss, *Computer Vision and Pattern Recognition (CVPR)*, 2019.
- A. Siarohin, E. Sangineto and N. Sebe, Whitening and Coloring Batch Transform for GANs, *Seventh International Conference on Learning Representations (ICLR)*, 2019.
- M. Ravanbakhsh, E. Sangineto, M. Nabi and N. Sebe, Training Adversarial Discriminators for Cross-Channel Abnormal Event Detection in Crowds, *IEEE Winter Conference on Applications of Computer Vision (WACV)* 2019.
- Subhankar Roy, Enver Sangineto, Begum Demir and Nicu Sebe, Semantic-fusion GANS for semi-supervised satellite image classification, *IEEE Intern. Conference on Image Processing (ICIP)*, 2018.



- A. Siarohin, E. Sangineto, S. Lathuiliere and N. Sebe, Deformable GANs for Pose-based Human Image Generation, *Computer Vision and Pattern Recognition (CVPR)*, 2018.
- Subhankar Roy, Enver Sangineto, Begum Demir and Nicu Sebe, Deep metric and Hash-code learning for content-based retrieval of remote sensing images, *IEEE Intern. Geoscience and Remote Sensing Symposium (IGARSS)* 2018.
- M. Ravanbakhsh, M. Nabi, H. Mousavi, E. Sangineto and N. Sebe, Plug-and-play CNN for crowd motion analysis: An application in abnormal event detection, *IEEE Winter Conference on Applications of Computer Vision (WACV)* 2018.
- Ravi Shekhar, Sandro Pezzelle, Aurelie Herbelot, Moin Nabi, Enver Sangineto and Raffaella Bernardi, Vision and Language Integration: Moving beyond Objects, *12th Int. Conf. on Computational Semantics (IWCS)* 2017.
- M. Ravanbakhsh, M. Nabi, E. Sangineto, L. Marcenaro, C. Regazzoni and N. Sebe, Abnormal Event Detection in Videos using Generative Adversarial Nets, *IEEE Intern. Conference on Image Processing (ICIP)* 2017 (award: best-student paper, second place).
- R. Shekhar, S. Pezzelle, Y. Klimovich, A. Herbelot, M. Nabi, E. Sangineto and R. Bernardi, FOIL it! Find One mismatch between Image and Language caption, *56th Annual Meeting of the Association for Computational Linguistics (ACL)* 2017 (long paper).
- Paolo Rota, Enver Sangineto, Valentina Conotter, Christopher Pramerdorfer, Bad Teacher or Unruly Student: Can Deep Learning Say Something in Image Forensics Analysis? *Intern. Conference on Pattern Recognition (ICPR)*, 2016.
- Mihai Marian Puscas, Enver Sangineto, Dubravko Culibrk, Nicu Sebe, Unsupervised Tube Extraction Using Transductive Learning and Dense Trajectories, *International Conference on Computer Vision (ICCV)*, pp. 1653-1661, 2015.
- Sergey Tulyakov, Radu-Laurentiu Vieri, Enver Sangineto, Nicu Sebe, FaceCept3D: Real Time 3D Face Tracking and Analysis, *ICCV Workshops*, pp. 28-33, 2015.
- R. Laurentiu, S. Tulyakov, S. Semeniuta, E. Sangineto, N. Sebe, Facial Expression Recognition under a Wide Range of Head Poses, *11th IEEE International Conference on Automatic Face and Gesture Recognition (FG)*, Ljubljana, Slovenia, May 4-8, 2015.
- E. Sangineto, Statistical and Spatial Consensus Collection for Detector Adaptation, *European Conference on Computer Vision (ECCV)*, 2014.
- G. Zen, E. Sangineto, E. Ricci, N. Sebe, Unsupervised Domain Adaptation for Personalized Facial Emotion Recognition, *Proceedings of the 16th ACM International Conference on Multimodal Interaction (ICMI)*, Istanbul, Turkey, November 12-16, 2014.
- E. Sangineto, G. Zen, E. Ricci, N. Sebe, We are not All Equal: Personalizing Models for Facial Expression Analysis with Transductive Parameter Transfer, *ACM Multimedia (ACM MM)*, Orlando, Florida, November 3-7, 2014 (long paper). This work has co-won the Best Student Poster Prize sponsored by Google Research at the 4th GNY Area Multimedia and Vision Meeting, October 3rd, 2014, New York.
- Enver Sangineto, Marco Cristani, Alessio Del Bue, Vittorio Murino, Learning Discriminative Spatial Relations for Detector Dictionaries: An Application to Pedestrian Detection, *European Conference on Computer Vision (ECCV)*, October 7-13, 2012, Florence, Italy.
- Paolo Bottoni, Luigi Cinque, Marco Cupelli, Luca Di Filippo, Anna Labella, Mario Pierro and Enver Sangineto, A Framework for Hand-Based Interaction, *13th*

*International Conference on Humans and Computers (HC-2010)*, December 6-10, 2010, Aizu-Wakamatsu, Japan.

- Christian Micheloni, Enver Sangineto, Luigi Cinque and Gian Luca Foresti, Improved statistical techniques for multi-part face detection and recognition, *16th Scandinavian Conferences on Image Analysis (SCIA)*, June 15-18, 2009, Oslo.
- L. Cinque, M. Cupelli, E. Sangineto, Fast viewpoint-invariant articulated hand detection combining curve and graph matching, *8th IEEE Conference on Automatic Face and Gesture Recognition (FG)*, September 17-19, 2008, Amsterdam.
- S. Levialdi, A. Malizia, T. Onorati, E. Sangineto and N. Sebe, Detecting attention through telepresence, *PRESENCE 2007, The 10th Annual International Workshop on Presence*, October 25-27, Barcelona, Spain, 2007.
- M. Bozzoli, L. Cinque and E. Sangineto, A Statistical Method for People Counting in Crowded Environments, *14th International Conference on Image Analysis and Processing (ICIAP)*, Modena, Italy, September 10-14, 2007.
- A. Ardochini, L. Cinque, F. Della Rocca and E. Sangineto, A semi-automatic approach to photo identification of wild elephants, *Lecture Notes in Computer Science (LNCS 4477), Proceedings of the 3rd Iberian Conference on Pattern Recognition and Image Analysis (IbPRIA)*, pp. 225-232, Girona (Spain), June 2007.
- L. Cinque, E. Sangineto and S. Tanimoto, Articulated Object Recognition: a General Framework and a Case Study, *Proceedings of the IEEE International Conference on Advanced Video and Signal based Surveillance (AVSS)*, Sydney, Australia, November 22-24, 2006.
- D. Petriccione, A. Ardochini, L. Cinque, F. Della Rocca, L. Massaro, A. Ortolani, E. Sangineto, Computer-aided wild elephant identification, *Proceedings of ISBE 2006, 11th Congress of the International Society for Behavior Ecology*, pp. 264, Tours, France, July 23-29, 2006.
- E. Sangineto and M. R. Iarusso Environment Topological Structure Recognition for Robot Navigation, *Lecture Notes in Computer Science, Proceedings of the 13th Intern. Conference on Image Analysis and Processing (ICIAP)*, Cagliari, Italy, September 2005, Springer-Verlag, **3617**, pp. 1093-1100.
- N. Capuano, M. Gaeta, A. Micarelli and E. Sangineto, Automatic Student Personalization in Preferred Learning Categories, *Proceedings of the 11th International Conference on Human-Computer Interaction (HCI) 2005*, July 22-27, 2005, Las Vegas, Nevada, USA. ISBN: 0805858075
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