LUIGI CELONA, PH.D.

Department of Informatics, Systems and Communication (DISCo)
University of Milano-Bicocca

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SHORT-BIO

Luigi Celona is currently an assistant professor at the Intelligent Sensing Lab (ISLab) of the Department of Informatics, Systems and Communication (DISCo), University of Milano-Bicocca, Italy. He earned the PhD and Master's Degree in Computer Science from the University of Milano-Bicocca in 2018 and 2014, respectively. He obtained the Bachelor's Degree in Computer Science at the University of Messina in 2011.
His current research fields are Computer Vision, Machine Learning, and Deep Learning.

RESEARCH ACTIVITY

Research interests

Luigi Celona mainly focuses on signal, image and video analysis and understanding. Image and video analysis studies focus primarily on defining perceptual metrics for assessing quality, aesthetics, and memorability. Some of the previous metrics were, among other things, used for image enhancement works. Visual understanding research is about facial analysis and monitoring. His work on audio signal understanding concerns the recognition of the speaker and the emotional state of the speaker.

Member of

Intelligent Sensing Lab (ISLab), University of Milano-Bicocca

Feb 2025 – OnGoing Milan, IT

Assistant Professor (RTD-a)

University of Milano-Bicocca

May 2024 – May 2026 **(3 years)** Milan, IT

Postdoctoral Fellow – A2

Imaging and Vision Lab (IVL), University of Milano-Bicocca

Apr 2019 – Mar 2023 **(2 years + 2 years)** Milan, IT

- **Title:** Image understanding, selection and manipulation leveraging multiple perceptual properties
- **Supervisor:** Prof. Paolo Napoletano and Prof. Raimondo Schettini

Postdoctoral Fellow – B

Imaging and Vision Lab (IVL), University of Milano-Bicocca

Dec 2017 – Mar 2019 **(1 year + 1 year)** Milan, IT

- **Title:** Image and video recognition using CNNs
- **Supervisor:** Prof. Raimondo Schettini
- **Project:** TEINVEIN, CUP: E96D17000110009 – Call "Accordi per la Ricerca e l'Innovazione", co-funded by POR FESR 2014-2020

Visiting Researcher

VIStA laboratory, University of Rochester

Jan 2017 – Apr 2017 **(4 months)** Rochester, NY

- **Supervisor:** Prof. Jiebo Luo

Ph.D. Student

Imaging and Vision Lab (IVL), University of Milano-Bicocca

Jan 2015 – Dec 2017 Milan, IT

- **Title:** Learning Quality, Aesthetics, and Facial Attributes for Image Annotation
- **Supervisor:** Prof. Paolo Napoletano and Prof. Raimondo Schettini

Research Assistant

Imaging and Vision Lab (IVL), University of Milano-Bicocca

Dec 2014 – Jan 2015 | Milan, IT

- **Title:** Facial features tracking and recognition in videos
- **Supervisor:** Prof. Raimondo Schettini
- **Project:** Feedin'Italy

Research Intern

ST Microelectronics

Apr 2014 – Oct 2014 | Agrate Brianza, IT

- **Research activity:** Fast object detector for car and pedestrian detection [c0]
- **Supervisor:** Dr. Danilo Pietro Pau

Research collaborations

Università della Svizzera Italiana: Multi-modal facial expression recognition [c23] — Apr 2022 – Ongoing — Lugano, CH

Media Technology Center (ETH Zurich): Image aesthetic assessment [c17] — Jan 2022 – Ongoing — Zurich, CH

Missouri State University: Neonatal pain monitoring [c2] — Jan 2019 – OnGoing — Springfield, MO

Sorbonne Université: Benchmark of common CNNs for image recognition [j4] — Jan 2018 – Oct 2018 — Paris, FR

RESEARCH PROJECTS

Coordinator

Mar 2018 – OnGoing

- **Title:** Simultaneous Estimation of Multiple Face Attributes using Deep Learning

This project has been supported by NVIDIA with donation of a Titan X Pascal GPU card.

Collaborator

National Centre for HPC: Technologies and models for Smart Cities and for the Digital Society — May 2023 – OnGoing

Huawei Technologies Co. Ltd, Russia: Multispectral reconstruction from RGB images* — Jan 2021 – Feb 2022

Huawei Technologies Co. Ltd, Russia: Audio speaker recognition* — Jan 2020 – Jan 2022

Regione Lombardia: Teinvein – Monitoraggio dello stato del conducente (CUP: E96D17000110009)* — Dec 2017 – Apr 2020

Regione Lombardia: The Home of IoT – Monitoraggio del volto (CUP: E47H16001380009)* — Dec 2017 – Jun 2019

Canon Europe: Irista – Annotazione automatica di immagini* — Dec 2015 – Oct 2019

Regione Lombardia: Feedin'Italy – Tracking e riconoscimento delle feature facciali (CUP: E47I11000760004)* — Dec 2014 – Jan 2015

*more than 100K Euro

TEACHING ACTIVITY

Lecturer

As part of the PhD's course "Image acquisition pipelines: embedded processing and post processing", University of Milano-Bicocca

Feb 2023 | Milan, IT

Perceptual quality assessment and autocropping

Invited Lecturer, 3 hours (1,5 hours × 2 years)

As part of the Erasmus+ Joint Master's Degree course "Computational Colour and Spectral Imaging (COSI)", University of Granada

Mar 2021 – Mar 2022 | Granada, ES

Automatic algorithms for haze removal in images and videos

Teaching Assistant, 4 hours (2 hours × 2 years)

Mediterranean Machine Learning summer school (M2L), DeepMind

Jan 2021 – Sep 2023 | Milan, IT

Supervised methods for image recognition using CNNs and ViTs

Teaching Assistant, 18 hours - 2 CFU

University of Pavia/University of Milano/University of Milano-Bicocca

Oct 2023 - Jan 2024 | Pavia, IT

Master Degree in Artificial Intelligence for Science and Technology: Intelligent Consumer Technologies

Teaching Assistant, 96 hours - 8 CFU (24 hours × 4 years)

University of Milano-Bicocca

Oct 2018 - Jan 2022 | Milan, IT

Master Degree in TTC: Visual Information Processing and Management

Teaching Assistant, 120 hours - 10 CFU (20 hours × 6 years)

University of Milano-Bicocca

Oct 2017 - Jan 2024 | Milan, IT

Bachelor Degree in Computer Science: C++ Programming (Programmazione e Amministrazione di Sistema)

Tutor, 40 hours

University of Milano-Bicocca

Oct 2017 - Jan 2018 | Milan, IT

Master Degree in Data Science: Data Visualization

Students Supervisor, Computer Science Bachelor (12) – Computer Science and Data Science Master (12)

University of Milano-Bicocca

EDUCATION

Ph.D. in Computer Science, XXX cycle

Imaging and Vision Laboratory (IVL), University of Milano-Bicocca

Nov 2014 - Nov 2017 | Milan, IT

- **Thesis:** Learning Quality, Aesthetics, and Facial Attributes for Image Annotation
- **Supervisors:** Prof. Paolo Napoletano and Prof. Raimondo Schettini

M.Sc. Cum Laude in Computer Science

Imaging and Vision Laboratory (IVL), University of Milano-Bicocca

Sept 2011 - Mar 2014 | Milan, IT

- **Thesis:** Facial Expression Recognition using Local Binary Patterns

B.Sc. Cum Laude in Computer Science

P&P Informatics, University of Messina

Sept 2007 - Mar 2011 | Messina, IT

- **Thesis:** Image Visualization and Comparison using API Maps for GWT

M.Sc. in Saxophone

Conservatorio di Musica "A. Corelli"

Jan 2008 - Apr 2010 | Messina, IT

PROFESSIONAL ACTIVITIES

Organizer of Conferences and Seminars

- Area Chair, IJCNN, Rome, June 2025 [https://2025.ijcnn.org/]
- 3rd Automatic Affect Analysis and Synthesis Workshop, ICIAP, Udine, September 2023 [https://sites.google.com/unimib.it/3asiciap2023]
- Session Chair, VISAPP, Rome, March 2024 [https://www.insticc.org/node/TechnicalProgram/VISIGRAPP/2024/posters/P22599]

Invited Speaker at Conferences and Seminars

- AI in Computer Vision: From content understanding to high-quality content generation @ *Nobel x AI x Sciences*, November 2024 [https://sites.google.com/unimib.it/nobel-x-ai/]
- Supercomputing and Big Data @ *Festival della Scienza*, October 2024 [https://www.festivalscienza.it/programma-2024/supercalcolo-e-big
- Modern Approaches to Explainable Image Aesthetic Assessment @ *Computational Color Imaging Workshop*, September 2024 [http://www.ivl.disco.unimib.it/minisites/cciw-2024/program.html]
- Novel AI Vision Algorithms and Deep Learning Techniques for Driver Monitoring, @ *ICSC Annual Meeting*, September 2024 [https://agenda.supercomputing-icsc.it/event/2/]
- Advances in Image Aesthetics Assessment: Concepts, Methods, and Applications, @ *London Imaging Meeting*, July 2024 [https://www.imaging.org/IST/IST/Conferences/LIM/LIM2024/Home.aspx]
- AI for Health Monitoring, @ *Orizzonti Intelligenti nella Salute*, March 2024 [https://www.cnr.it/sites/default/files/public/media/Convegno_AI_1.pdf]
- Exploring Image Quality and Aesthetics in Consumer Photography, @ *Technical Talks of IEEE CTSoc*, December 2023 [https://ctsoc.ieee.org/technical/technical-talks.html]
- A benchmark of neural methods for speaker verification, @ *Huawei Acoustic, Speech and Audio Processing Workshop* organized by Media Algorithm Laboratory, Moscow Research Center, December 2021

Speaker at Conferences and Seminars

- Air Quality and Technology: IoT and IA solutions for Monitoring and Forecasting, In *Milano Digital Week*, October 2024 [https://regains.disco.unimib.it/milano-digital-week/]
- Arm Gesture Recognition With Smartwatches [c27] and Multivariate Forecasting of Multiple Pollutants With Representative Deep Learning Architectures [c30], In *RTSI*, September 2024 [https://2024.ieee-rtsi.org/wp-content/uploads/sites/600/RTSI2024_FinalProgram_v2.pdf]
- On the Use of Visual Transformer for Image Complexity Assessment [c28], In: *VISAPP*, March 2024 [https://www.insticc.org/node/TechnicalProg VISIGRAPP/2024/presentationDetails/124265]
- Video-based emotion estimation using deep neural networks: a comparative study, In: *3rd Automatic Affect Analysis and Synthesis Workshop*, September 2023
- A benchmark of neural methods for speaker verification, In: *Huawei Acoustic, Speech and Audio Processing Workshop* organized by Media Algorithm Laboratory, Moscow Research Center, Huawei, December 2021
- ArabCeleb: Speaker Recognition in Arabic [c18], In: *International Conference of the Italian Association for Artificial Intelligence*, December 2021 [https://aixia2021.disco.unimib.it/program]
- Who is in the crowd? Deep face analysis for crowd understanding [c14], In: *Workshop on Deep Understanding Shopper Behaviours and Interactions in Intelligent Retail Environments*, January 2020 [https://deepretail.dii.univpm.it]
- Getting the most of few data for neonatal pain assessment [c9], In: *Affective Computing in Pervasive Health*, May 2019 [http://pervasivehealth.org/affectph/]
- Aesthetic quality assessment of images containing faces [c5], In: *International conference on image processing (ICIP)*, October 2018 [https://2018.ieeeicip.org/default.asp]
- A Blender plug-in for comparing Structure from Motion pipelines [c3], In: *International conference on consumer electronics – Berlin (ICCE-Berlin)*, September 2018 [http://www.icce-berlin.org]
- Multi-task CNN for driver monitoring [c4], In: *International conference on consumer electronics – Berlin (ICCE-Berlin)*, September 2018 [http://www.icce-berlin.org]
- Visual-based Sentiment Logging in Magic Smart Mirrors [c6], In: *International conference on consumer electronics – Berlin (ICCE-Berlin)*, September 2018 [http://www.icce-berlin.org]
- "Guess Who?": Face recognition and description using Deep Learning, In: *Deep Learning for Computer Vision Workshop*, March 2018 [https://milanodigitalweek.com/eventi/deep-learning-for-computer-vision/]
- Neonatal facial pain assessment combining hand-crafted and deep features [c2], In: *Workshop on automatic affect analysis and synthesis (3AS)*, September 2017 [http://www.ivl.disco.unimib.it/minisites/w3as/index.html]
- Robust smile detection using CNNs [j1], In: *Workshop on deep learning for visual computing*, November 2016 [http://www.ivl.disco.unimib.it/dlvc16/]
- Smart camera for embedded object category detection [c0], In: *GTTI Multimedia*, March 2015 [http://gttimultimedia2015.polito.it]

Editor

- Associate Editor of Elsevier Neurocomputing **[IF: 6.000, Q1]**
- Associate Editor of Springer Image, Signal and Video Processing **[IF: 2.157, Q2]**
- Guest Editor of the "Novel Approaches to Image Quality Assessment" Special Issue held from the MDPI Journal of Imaging
- Topic Editor of the MDPI Journal of Imaging **[IF: 3.2, Q2]**

- Topic Editor of the MDPI Electronics Journal **[IF: 2.9, Q2]**

Reviewer

- IEEE Transactions on Image Processing **[IF: 11.041, Q1]**
- IEEE Transactions on Multimedia **[IF: 6.513, Q1]**
- IEEE Access **[IF: 3.745, Q1]**
- Elsevier Pattern Recognition **[IF: 7.196, Q1]**
- Elsevier Pattern Recognition Letters **[IF: 3.255, Q1]**
- ACM Computing Surveys **[IF: 14.324, Q1]**
- ACM Transactions on Multimedia Computing Communications and Applications **[IF: 3.980, Q2]**
- Springer Multimedia Tools and Applications **[IF: 2.577, Q2]**
- SPIE Journal of Electronic Imaging **[IF: 0.884, Q3]**

Technical Program Committee

- International Joint Conference on Neural Networks 2025 (Area Chair) **[CORE2021 Rank: B]**
- Computer Vision and Patter Recognition 2025 **[CORE2021 Rank: A*]**
- International Conference on Machine Learning 2023 **[CORE2021 Rank: A*]**
- International Conference on Learning Representations 2023 **[CORE2021 Rank: A*]**
- ACM Multimedia since 2021 **[CORE2021 Rank: A*]**
- NeurIPS since 2022 **[CORE2021 Rank: A*]**
- British Machine Vision Conference (BMVC) since 2022 **[CORE2021 Rank: A]**
- Interspeech since 2022 **[CORE2021 Rank: A]**
- International Conference on Pattern Recognition (ICPR) since 2020 **[CORE2021 Rank: B]**
- VISAPP since 2020 **[CORE2021 Rank: B]**
- Colour Imaging Conference 2021

AWARDS AND AFFILIATIONS

GPU Grant Program

NVIDIA Corporation

Mar 2018

- **Project:** Simultaneous Estimation of Multiple Face Attributes using Deep Learning
- **Price:** Donation of a Titan X Pascal GPU (value of about 1400 Euro)

Premio Giovani Talenti

University of Milano-Bicocca

Sept 2023

- **Motivation:** For his highly innovative research and contributions on image and video analysis.
- **Price:** Contribution of 1000 Euro.

Member of Research Centers and Associations

- BIPAC – Interdepartmental Research Centre for Artistic and Cultural Heritage
- HPC – National HPC, Big Data and Quantum Computing Centre
- CVPL – Italian Association for Research in Computer Vision, Pattern recognition and Machine Learning
- ELLIS Society – ELLIS is a pan-European network of excellence in artificial intelligence
- GRIN – Italian Informatics Society
- IEEE CTSoc Machine learning, Deep learning and AI in CE (MDA) – For which I act as Secretary and Conferences Liaison

PUBLICLY AVAILABLE RESEARCH PRODUCTS (SOFTWARE & DATASETS)

- Video emotion estimation on the OMG-Emotion dataset [c23], 2023
- Reddit Photo Critique Dataset (RPCD) and aesthetic benchmark [c17], 2022
- A method for blind image quality assessment [j11]. 2022.
- ArabCeleb, a speaker recognition dataset in arabic [c18]. 2021.

- A library containing common spectral similarity measures [c16]. 2021.
- A Python benchmark of deep neural networks for image recognition [j4]. 2018.

PUBLICATIONS



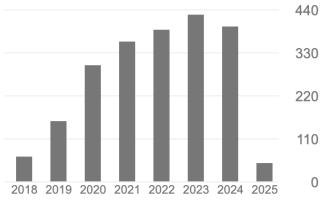
Luigi Celona

Assistant Professor, University of Milano-Bicocca
Email verificata su unimib.it - Home page
Visual quality assessment Computer vision Deep learning Machine learning

TITOLO	CITATA DA	ANNO
Benchmark analysis of representative deep neural network architectures S Bianco, R Cadene, L Celona, P Napoletano IEEE access 6, 64270-64277	1029	2018
On the use of deep learning for blind image quality assessment S Bianco, L Celona, P Napoletano, R Schettini Signal, Image and Video Processing 12, 355-362	398	2018

Citata da

	Tutte	Dal 2020
Citazioni	2175	1919
Indice H	18	16
i10-index	23	22



Under Review

[s4] Simone Bianco, Luigi Celona, and Paolo Napoletano. "Cross-Camera Distracted Driver Classification through Feature Disentanglement and Contrastive Learning". Submitted to Transactions on Intelligent Transportation Systems. 2024.

[s3] Simone Bianco, Luigi Celona, and Paolo Napoletano. "Improving Image Captioning Descriptiveness by Ranking and LLM-based Fusion". Submitted to Transactions on Human-Machine Systems. 2024.

[s2] Luigi Celona, Gianluigi Ciocca, and Raimondo Schettini. "Image complexity estimation using general-purpose features from foundation models". Submitted to Elsevier Signal Processing: Image Communication. 2024.

[s1] Luigi Celona and Flavio Piccoli. "Advancing Real-world Image Dehazing: A Comprehensive Dataset and Evaluation Metrics". Submitted to Sprigner Transactions on Image Processing. 2023.

Journal Articles

[j14] Simone Bianco, Luigi Celona, Paolo Crotti, Paolo Napoletano, Giovanni Petraglia, and Pietro Vinetti. "Enhancing Direction-of-Arrival Estimation with Multi-Task Learning". In: *MDPI Sensors* 24.22 (2024), p. 7390. **[IF: 3.275, Q2]**

[j13] Mirko Agarla, Simone Bianco, Luigi Celona, Paolo Napoletano, Alexey Petrovsky, Flavio Piccoli, Raimondo Schettini, and Ivan Shanin. "Semi-supervised cross-lingual speech emotion recognition". In: *Elsevier Expert Systems with Applications* 237 (2023), p. 121368. ISSN: 0957-4174. **[IF: 8.665, Q1]**

[j12] Luigi Celona, Marco Leonardi, Paolo Napoletano, and Alessandro Rozza. "Composition and Style Guided Image Aesthetic Assessment". In: *IEEE Transactions on Image Processing* (2022). **[IF: 11.041, Q1]**

[j11] Luigi Celona and Raimondo Schettini. "Blind quality assessment of authentically distorted images". In: *Journal of the Optical Society of America A* 39.6 (July 2022), B1–B10. **[IF: 2.129, Q1]**

[j10] Mirko Agarla, Luigi Celona, and Raimondo Schettini. "An Efficient Method for No-Reference Video Quality Assessment". In: *MDPI Journal of Imaging* 7.3 (2021), p. 55. **[IF: 3.200, Q2]**

[j9] Simone Bianco, Luigi Celona, Gianluigi Ciocca, Davide Marelli, Paolo Napoletano, Stefano Yu, and Raimondo Schettini. "A Smart Mirror for Emotion Monitoring in Home Environments". In: *MDPI Sensors* 21.22 (2021). **[IF: 3.275, Q2]**

[j8] Simone Bianco, Luigi Celona, and Paolo Napoletano. "Disentangling Image Distortions in Deep Feature Space". In: *Elsevier Pattern Recognition Letters* 148 (2021), pp. 128–135. ISSN: 0167-8655. **[IF: 3.756, Q1]**

[j7] Luigi Celona, Gianluigi Ciocca, and Paolo Napoletano. "A Grid Anchor based Cropping Approach Exploiting Image Aesthetics, Geometric Composition, and Semantics". In: *Elsevier Expert Systems with Applications* 186 (2021), p. 115852. **[IF: 8.665, Q1]**

[j6] Luigi Celona and Raimondo Schettini. "A Genetic Algorithm to Combine Deep Features for the Aesthetic Assessment of Images Containing Faces". In: *MDPI Sensors* 21.4 (2021), p. 1307. **[IF: 3.275, Q2]**

[j5] Mirko Agarla, Luigi Celona, and Raimondo Schettini. "No-Reference Quality Assessment of In-Capture Distorted Videos". In: *MDPI Journal of Imaging* 6.8 (2020), p. 74. **[IF: 3.200, Q2]**

[j4] Simone Bianco, Remi Cadene, Luigi Celona, and Paolo Napoletano. "Benchmark analysis of representative deep neural network architectures". In: *IEEE Access* 6 (2018), pp. 64270–64277. **[IF: 3.367, Q1]**

[j3] Simone Bianco, Luigi Celona, Paolo Napoletano, and Raimondo Schettini. "On the use of deep learning for blind image quality assessment". In: *Springer Signal, Image and Video Processing* 12.2 (2018), pp. 355–362. **[IF: 2.157, Q2]**

[j2] Luigi Celona, Simone Bianco, and Raimondo Schettini. "Fine-grained face annotation using deep multi-task cnn". In: *MDPI Sensors* 18.8 (2018), p. 2666. **[IF: 3.275, Q2]**

[j1] Simone Bianco, Luigi Celona, and Raimondo Schettini. "Robust smile detection using convolutional neural networks". In: *SPIE Journal of Electronic Imaging* 25.6 (2016), p. 063002. **[IF: 0.884, Q3]**

Book Chapters

[b1] Raimondo Schettini, Simone Bianco, Luigi Celona, and Paolo Napoletano. “Smart roads and smart cars: prospettive, opportunità, responsabilità”. In: ed. by G. Giappichelli Editore. 2019. Chap. Multimodal Car Driver Monitoring. ISBN: 9788892131606.

Conference Papers

[c30] Simone Bianco, Luigi Celona, Matteo Lanzillotti, and Paolo Napoletano. “Multivariate Forecasting of Multiple Pollutants with Representative Deep Learning Architectures”. In: *8th Forum on Research and Technologies for Society and Industry Innovation (RTSI)*. IEEE. 2024, pp. 630–635.

[c29] Luigi Celona and Simone Bianco. “Advances in Image Aesthetics Assessment: Concepts, Methods, and Applications”. In: *London Imaging Meeting*. Vol. 5. Society for Imaging Science and Technology. 2024, pp. 1–5.

[c28] Luigi Celona, Gianluigi Ciocca, and Raimondo Schettini. “On the Use of Visual Transformer for Image Complexity Assessment”. In: *Proceedings of the 19th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications-Volume 3: VISAPP*. 2024, pp. 640–647.

[c27] Andrea Colombo, Luigi Celona, Simone Bianco, Antonino Nocera, and Paolo Napoletano. “Arm Gesture Recognition with Smartwatches”. In: *8th Forum on Research and Technologies for Society and Industry Innovation (RTSI)*. IEEE. 2024, pp. 625–629.

[c26] Xiaohong Liu, Xiongkuo Min, Guangtao Zhai, Chunyi Li, Tengchuan Kou, ..., Luigi Celona, Simone Bianco, Paolo Napoletano, Raimondo Schettini, et al. “NTIRE 2024 Quality Assessment of AI-Generated Content Challenge”. In: *Conference on Computer Vision and Pattern Recognition*. IEEE/CVF. 2024, pp. 6337–6362.

[c25] Mirko Agarla, Luigi Celona, Claudio Rota, and Raimondo Schettini. “Quality assessment of enhanced videos guided by aesthetics and technical quality attributes”. In: *Conference on Computer Vision and Pattern Recognition (CVPR) Workshops*. IEEE/CVF. 2023, pp. 1533–1541. **[CORE2021 Rank: A*]**

[c24] Mirko Agarla, Luigi Celona, Raimondo Schettini, et al. “Predicting video memorability using a model pretrained with natural language supervision”. In: *MediaEval Multimedia Benchmark Workshop Working Notes*. Vol. 1. CEUR Workshop Proceedings. 2023.

[c23] Leonardo Alchieri, Luigi Celona, and Simone Bianco. “Video-based emotion estimation using deep neural networks: a comparative study”. In: *ICIAP 3AS Workshop*. 2023.

[c22] Simone Bianco, Luigi Celona, Giovanni Donato Gallo, and Paolo Napoletano. “A platform for multi-modal driver behaviour data collection”. In: *2023 IEEE 13th International Conference on Consumer Electronics-Berlin (ICCE-Berlin)*. IEEE. 2023.

[c21] Xiaohong Liu, Radu Timofte, Yunlong Dong, Zhiliang Ma, Haotian Fan, Chunzheng Zhu, Xiongkuo Min, Guangtao Zhai, Ziheng Jia, Mirko Agarla, et al. “NTIRE 2023 quality assessment of video enhancement challenge”. In: *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*. 2023, pp. 1551–1569.

[c20] Mirko Agarla, Simone Bianco, Marco Buzzelli, Luigi Celona, and Raimondo Schettini. “Fast-N-Squeeze: Towards Real-Time Spectral Reconstruction From RGB Images”. In: *Conference on Computer Vision and Pattern Recognition (CVPR) Workshops*. IEEE/CVF. June 2022, pp. 1132–1139. **[CORE2021 Rank: A*]**

[c19] Boaz Arad, Radu Timofte, Rony Yahel, Nimrod Morag, Amir Bernat, Yuanhao Cai, Jing Lin, Zudi Lin, Haoqian Wang, Yulun Zhang, Hanspeter Pfister, and Luc Van Gool. “NTIRE 2022 Spectral Recovery Challenge and Data Set”. In: *Conference on Computer Vision and Pattern Recognition (CVPR) Workshops*. IEEE/CVF. June 2022, pp. 863–881. **[CORE2021 Rank: A*]**

[c18] Simone Bianco, Luigi Celona, Intissar Khalifa, Paolo Napoletano, Alexey Petrovsky, Flavio Piccoli, Raimondo Schettini, and Ivan Shanin. “ArabCeleb: Speaker Recognition in Arabic”. In: *AIxIA 2021 – Advances in Artificial Intelligence*. Cham: Springer International Publishing, 2022, pp. 338–347. ISBN: 978-3-031-08421-8.

[c17] Daniel Vera Nieto, Luigi Celona, and Clara Fernandez Labrador. “Understanding Aesthetics with Language: A Photo Critique Dataset for Aesthetic Assessment”. In: *Advances in Neural Information Processing Systems*. Ed. by S. Koyejo, S. Mohamed, A. Agarwal, D. Belgrave, K. Cho, and A. Oh. Vol. 35. Curran Associates, Inc., 2022, pp. 34148–34161. **[CORE2021 Rank: A*]**

[c16] Mirko Agarla, Simone Bianco, Luigi Celona, Raimondo Schettini, and Mikhail Tchobanou. “An analysis of spectral similarity measures”. In: *Color and Imaging Conference*. Vol. 2021. 29. Society for Imaging Science and Technology. 2021, pp. 300–305.

[c15] Mirko Agarla and Luigi Celona. “On the Semantic Dependency of Video Quality Assessment Methods”. In: *London Imaging Meeting*. 5. Society for Imaging Science and Technology. 2021, pp. 49–53.

[c14] Simone Bianco, Luigi Celona, and Raimondo Schettini. “Who Is in the Crowd? Deep Face Analysis for Crowd Understanding”. In: *Pattern Recognition. ICPR International Workshops and Challenges: Virtual Event, January 10–15, 2021, Proceedings, Part II*. Springer International Publishing. 2021, pp. 487–494. **[CORE2021 Rank: B]**

[c13] Simone Bianco, Luigi Celona, and Flavio Piccoli. “Single Image Dehazing by Predicting Atmospheric Scattering Parameters”. In: *London Imaging Meeting*. Vol. 2020. 1. Society for Imaging Science and Technology. 2020, pp. 74–77.

[c12] Luigi Celona and Raimondo Schettini. “CNN-based image quality assessment of consumer photographs”. In: *London Imaging Meeting*. Vol. 2020. 1. Society for Imaging Science and Technology. 2020, pp. 129–133.

[c11] Codruta O Ancuti, Cosmin Ancuti, Radu Timofte, Luc Van Gool, Lei Zhang, and Ming-Hsuan Yang. “NTIRE 2019 image dehazing challenge report”. In: *Conference on Computer Vision and Pattern Recognition (CVPR) Workshops*. IEEE/CVF. 2019. **[CORE2021 Rank: A*]**

[c10] Simone Bianco, Luigi Celona, Flavio Piccoli, and Raimondo Schettini. “High-resolution single image dehazing using encoder-decoder architecture”. In: *Conference on Computer Vision and Pattern Recognition (CVPR) Workshops*. IEEE/CVF. 2019. **[CORE2021 Rank: A*]**

[c9] Luigi Celona, Sheryl Brahnam, and Simone Bianco. “Getting the most of few data for neonatal pain assessment”. In: *Proceedings of the 13th EAI International Conference on Pervasive Computing Technologies for Healthcare*. 2019, pp. 298–301.

[c8] Luigi Celona, Gianluigi Ciocca, Paolo Napoletano, and Raimondo Schettini. “Autocropping: A Closer Look at Benchmark Datasets”. In: *International Conference on Image Analysis and Processing*. Springer. 2019, pp. 315–325.

[c7] Marco Leonardi, Luigi Celona, Paolo Napoletano, Simone Bianco, Raimondo Schettini, Franco Manessi, and Alessandro Rozza. “Image memorability using diverse visual features and soft attention”. In: *International Conference on Image Analysis and Processing*. Springer. 2019, pp. 171–180.

[c6] Simone Bianco, Luigi Celona, and Paolo Napoletano. “Visual-based sentiment logging in magic smart mirrors”. In: *2018 IEEE 8th International Conference on Consumer Electronics-Berlin (ICCE-Berlin)*. IEEE. 2018, pp. 1–4.

[c5] Simone Bianco, Luigi Celona, and Raimondo Schettini. “Aesthetics assessment of images containing faces”. In: *2018 25th IEEE International Conference on Image Processing (ICIP)*. IEEE. 2018, pp. 2820–2824. **[CORE2021 Rank: B]**

[c4] Luigi Celona, Lorenzo Mammana, Simone Bianco, and Raimondo Schettini. “A multi-task CNN framework for driver face monitoring”. In: *2018 IEEE 8th International Conference on Consumer Electronics-Berlin (ICCE-Berlin)*. IEEE. 2018, pp. 1–4.

[c3] Davide Marelli, Simone Bianco, Luigi Celona, and Gianluigi Ciocca. “A Blender plug-in for comparing Structure from Motion pipelines”. In: *2018 IEEE 8th International Conference on Consumer Electronics-Berlin (ICCE-Berlin)*. IEEE. 2018, pp. 1–5.

[c2] Luigi Celona and Luca Manoni. “Neonatal facial pain assessment combining hand-crafted and deep features”. In: *International Conference on Image Analysis and Processing*. Springer. 2017, pp. 197–204.

[c1] Simone Bianco, Luigi Celona, Paolo Napoletano, and Raimondo Schettini. “Predicting image aesthetics with deep learning”. In: *International Conference on advanced concepts for intelligent vision systems*. Springer. 2016, pp. 117–125.

[c0] Emanuele Plebani, Luigi Celona, Danilo Pau, Pegah Karimi, and Marco Marcon. “Training an object detector using only positive samples”. In: *International Workshop on Consumer Electronics (CE WS)*. IEEE. 2015, pp. 1–4.

Updated: February, 2025

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