

PUBLICATIONS BY Adria Mallol-Ragolta

26 January 2024

Current h-index: **12** (source: Google Scholar)

Current citation count: **693** (source: Google Scholar)

A) BOOKS

Contributions to Books (1):

- 1) N. Cummins, Z. Ren, A. Mallol-Ragolta, and B. Schuller, "Machine learning in digital health, recent trends, and ongoing challenges," in *Artificial Intelligence in Precision Health* (D. Barh, ed.), ch. 5, pp. 121–148, Academic Press/Elsevier, 2020. invited contribution

B) REFEREED JOURNAL PAPERS (7)

- 2) A. Triantafyllopoulos, A. Kathan, A. Baird, L. Christ, A. Gebhard, M. Gerczuk, V. Karas, T. Hübner, X. Jing, S. Liu, A. Mallol-Ragolta, M. Milling, S. Ottl, A. Semertzidou, S. T. Rajamani, T. Yan, Z. Yang, J. Dineley, S. Amiriparian, K. Bartl-Pokorny, A. Batliner, F. Pokorny, and B. Schuller, "HEAR4Health: A blueprint for making computer audition a staple of modern healthcare," *Frontiers in Digital Health, section Digital Health Communication*, vol. 5, September 2023. Article ID 1196079
- 3) A. Mallol-Ragolta, A. Semertzidou, M. Pateraki, and B. Schuller, "Outer Product-Based Fusion of Smartwatch Sensor Data for Human Activity Recognition," *Frontiers in Computer Science, section Mobile and Ubiquitous Computing*, vol. 4, pp. 1–10, March 2022. Article ID 796866. 2022 Outstanding Article Award
- 4) S. Liu, A. Mallol-Ragolta, E. Parada-Cabaleiro, K. Qian, X. Jing, A. Kathan, B. Hu, and B. Schuller, "Audio Self-supervised Learning: A Survey," *Patterns*, vol. 3, December 2022. 28 pages, Article ID 100616
- 5) S. Liu, A. Mallol-Ragolta, T. Yan, K. Qian, E. Parada-Cabaleiro, B. Hu, and B. Schuller, "Capturing Time Dynamics from Speech using Neural Networks for Surgical Masks Detection," *IEEE Journal of Biomedical and Health Informatics*, vol. 26, pp. 4291–4302, May 2022
- 6) M. M. Mohamed, M. A. Nessiem, A. Batliner, C. Bergler, S. Hantke, M. Schmitt, A. Baird, A. Mallol-Ragolta, V. Karas, S. Amiriparian, and B. Schuller, "Face Mask Recognition from Audio: The MASC Database and an Overview on the Mask Challenge," *Pattern Recognition*, vol. 122, pp. 1–11, February 2022. Article ID 108361
- 7) M. Song, A. Mallol-Ragolta, E. Parada-Cabaleiro, Z. Yang, S. Liu, Z. Ren, Z. Zhao, and B. Schuller, "Frustration Recognition from Speech During Game Interaction Using Wide Residual Networks," *Virtual Reality & Intelligent Hardware*, vol. 3, pp. 76–86, February 2021
- 8) S. Amiriparian, J. Han, M. Schmitt, A. Baird, A. Mallol-Ragolta, M. Milling, M. Gerczuk, and B. Schuller, "Synchronisation in Interpersonal Speech," *Frontiers in Robotics and AI, section Humanoid Robotics, Special Issue on Computational Approaches for Human-Human and Human-Robot Social Interactions*, vol. 6, pp. 1–10, November 2019. Article ID 116

C) REFEREED CONFERENCE PROCEEDINGS

Contributions to Conference Proceedings (25):

- Digital Phenotyping," in *Proceedings of the 49th International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2024*, (Seoul, Korea), IEEE, IEEE, April 2024. 2 pages, to appear
- 10) A. Mallol-Ragolta, N. Urbach, S. Liu, A. Batliner, and B. Schuller, "The MASFLICHT Corpus: Face Mask Type and Coverage Area Recognition from Speech," in *Proceedings of the 24th Annual Conference of the International Speech Communication Association, INTERSPEECH 2023*, (Dublin, Ireland), ISCA, ISCA, August 2023. 5 pages, to appear
- 11) S. Liu, A. Mallol-Ragolta, and B. Schuller, "COVID-19 Detection from Speech in Noisy Conditions," in *Proceedings of the 48th International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2023*, (Rhodes, Greece), IEEE, IEEE, June 2023. 5 pages, to appear
- 12) S. Pompe, A. Mallol-Ragolta, N. Schauer, and B. Schuller, "Exploring Shapely Values for Blood Glucose Level Prediction from Speech," in *Proceedings of the 15th ITG Conference on Speech Communication, ITG 2023*, (Aachen, Germany), VDE, IEEE, September 2023. 5 pages, to appear
- 13) A. Mallol-Ragolta, S. Liu, and B. Schuller, "COVID-19 Detection Exploiting Self-Supervised Learning Representations of Respiratory Sounds," in *Proceedings of the International Conference on Biomedical and Health Informatics, BHI 2022*, (Ioannina, Greece – Hybrid Event), EMBS, IEEE, September 2022. 4 pages, to appear (acceptance rate: 31.3 %)
- 14) A. Mallol-Ragolta, H. Cuesta, E. Gómez, and B. Schuller, "Multi-Type Outer Product-Based Fusion of Respiratory Sounds for Detecting COVID-19," in *Proceedings of the 23rd Annual Conference of the International Speech Communication Association, INTERSPEECH 2022*, (Incheon, Korea – Hybrid Event), pp. 2163 – 2167, ISCA, ISCA, September 2022. (acceptance rate: 50 %)
- 15) A. Mallol-Ragolta, F. B. Pokorny, K. D. Bartl-Pokorny, A. Semertzidou, and B. Schuller, "Triplet Loss-Based Models for COVID-19 Detection from Vocal Sounds," in *Proceedings of the 44th Annual International Conference of the Engineering in Medicine & Biology Society, EMBC 2022*, (Glasgow, UK), pp. 998 – 1001, EMBS, IEEE, July 2022
- 16) A. Mallol-Ragolta, M. Maniadakis, G. Papadopoulos, and B. Schuller, "Time Series Representation using TS2Vec on Smartwatch Sensor Data for Fatigue Estimation," in *Proceedings of the 13th International Conference on Applied Human Factors and Ergonomics, track Human Factors and Systems Interaction, AHFE 2022*, vol. 52, (New York, NY, USA), AHFE International Conference, AHFE Open Access, July 2022. 7 pages, to appear
- 17) A. Mallol-Ragolta, I. Varlamis, M. Pateraki, M. Lourakis, G. Athanassiou, M. Maniadakis, K. Papoutsakis, T. Papadopoulos, A. Semertzidou, N. Cummins, B. Schuller, I.-A. Karolos, C. Pikridas, P. Patias, S. Vantolas, L. Kallipolitis, F. Werner, A. Ascolese, and V. Nitti, "sustAGE 1.0 – First Prototype, Use Cases, and Usability Evaluation," in *Proceedings of the 7th International Conference on Human Interaction & Emerging Technologies: Artificial Intelligence & Future Applications, IHET-AI 2022*, vol. 23, (Lausanne, Switzerland – Virtual Event), AHFE International Conference, AHFE Open Access, April 2022. 10 pages, to appear
- 18) V. Karas, M. K. Tellamekala, A. Mallol-Ragolta, M. Valstar, and B. Schuller, "Time-Continuous Audiovisual Fusion with Recurrence vs. Attention for In-The-Wild Affect Recognition," in *Workshop Proceedings of the Conference on Computer Vision and Pattern Recognition, CVPR 2022*, (New Orleans, LA, USA), pp. 2382–2391, Computer Vision Foundation, IEEE, June 2022
- 19) M. Milling, I. Aslan, M. Berghofer, A. Mallol-Ragolta, U. Kunwar, and B. Schuller, "Online Personalisation of Deep Mobile Activity Recognisers," in *Proceedings of the 7th International Workshop on Sensor-Based Activity Recognition and Artificial*

- Intelligence, iWOAR 2022*, (Rostock, Germany), Fraunhofer IGD and University of Rostock, ACM, September 2022. 7 pages, to appear
- 20) B. Schuller, A. Batliner, S. Amiriparian, C. Bergler, M. Gerczuk, N. Holz, P. Larrouy-Maestri, S. Bayerl, K. Riedhammer, A. Mallol-Ragolta, M. Pateraki, H. Coppock, I. Kiskin, M. Sinka, and S. Roberts, "The ACM Multimedia 2022 Computational Paralinguistics Challenge: Vocalisations, Stuttering, Activity, & Mosquitoes," in *Proceedings of the 30th International Conference on Multimedia, MM 2022*, (Lisbon, Portugal), ACM, ACM, October 2022. 5 pages, to appear
 - 21) A. Mallol-Ragolta, A. Semertzidou, M. Pateraki, and B. Schuller, "harAGE: A Novel Multimodal Smartwatch-based Dataset for Human Activity Recognition," in *Proceedings of the 16th International Conference on Automatic Face and Gesture Recognition, FG 2021*, (Jodhpur, India – Virtual Event), IEEE, IEEE, December 2021. 7 pages (acceptance rate: 35 %)
 - 22) A. Mallol-Ragolta, S. Liu, and B. Schuller, "The Filtering Effect of Face Masks in their Detection from Speech," in *Proceedings of the 43rd Annual International Conference of the Engineering in Medicine & Biology Society, EMBC 2021*, (Guadalajara, Mexico – Virtual Event), pp. 2079–2082, EMBS, IEEE, October 2021
 - 23) A. Mallol-Ragolta, H. Cuesta, E. Gómez, and B. Schuller, "Cough-based COVID-19 Detection with Contextual Attention Convolutional Neural Networks and Gender Information," in *Proceedings of the 22nd Annual Conference of the International Speech Communication Association, INTERSPEECH 2021*, (Brno, Czechia – Hybrid Event), pp. 941–945, ISCA, ISCA, September 2021. (acceptance rate: 49 %)
 - 24) S. Liu, A. Mallol-Ragolta, and B. Schuller, "COVID-19 Detection with a Novel Multi-Type Deep Fusion Method using Breathing and Coughing Information," in *Proceedings of the 43rd Annual International Conference of the Engineering in Medicine & Biology Society, EMBC 2021*, (Guadalajara, Mexico – Virtual Event), pp. 1840–1843, EMBS, IEEE, October 2021
 - 25) S. Tirunellai Rajamani, K. Tirunellai Rajamani, A. Mallol-Ragolta, S. Liu, and B. Schuller, "A Novel Attention-based Gated Recurrent Unit and its Efficacy in Speech Emotion Recognition," in *Proceedings of the 46th International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2021*, (Toronto, Canada – Virtual Event), pp. 6294–6298, IEEE, IEEE, June 2021. (acceptance rate: 48 %)
 - 26) A. Mallol-Ragolta, N. Cummins, and B. Schuller, "An Investigation of Cross-Cultural Semi-Supervised Learning for Continuous Affect Recognition," in *Proceedings of the 21st Annual Conference of the International Speech Communication Association, INTERSPEECH 2020*, (Shanghai, China – Virtual Event), pp. 511–515, ISCA, ISCA, October 2020. (acceptance rate: 47 %)
 - 27) A. Mallol-Ragolta, S. Liu, N. Cummins, and B. Schuller, "A Curriculum Learning Approach for Pain Intensity Recognition from Facial Expressions," in *Workshop Proceedings of the 15th International Conference on Automatic Face & Gesture Recognition, FG 2020*, (Buenos Aires, Argentina – Virtual Event), pp. 534–538, IEEE, IEEE, May 2020
 - 28) D. Aspandi, A. Mallol-Ragolta, B. Schuller, and X. Binefa, "Latent-Based Adversarial Neural Networks for Facial Affect Estimations," in *Workshop Proceedings of the 15th International Conference on Automatic Face & Gesture Recognition, FG 2020*, (Buenos Aires, Argentina – Virtual Event), pp. 348–352, IEEE, IEEE, May 2020
 - 29) L. Stappen, A. Baird, G. Rizos, P. Tzirakis, X. Du, F. Hafner, L. Schumann, A. Mallol-Ragolta, B. Schuller, I. Lefter, E. Cambria, and I. Kompatsiaris, "MuSe 2020 Challenge and Workshop: Multimodal Sentiment Analysis, Emotion-target Engagement and Trustworthiness Detection in Real-life Media," in *Proceedings of the 1st Multimodal Sentiment in Real-life Media Challenge and Workshop, MuSe 2020*, co-located with the 28th International Conference on Multimedia, MM 2020, (Seattle, WA – Virtual Event), pp. 35–44, ACM, ACM, October 2020
 - 30) A. Mallol-Ragolta, Z. Zhao, L. Stappen, N. Cummins, and B. Schuller, "A Hierarchical Attention Network-Based Approach for Depression Detection from Transcribed Clinical Interviews," in *Proceedings of the 20th Annual Conference of the International Speech Communication Association, INTERSPEECH 2019*, (Graz, Austria), pp. 221–225, ISCA, ISCA, September 2019. (acceptance rate: 49.3 %)
 - 31) A. Mallol-Ragolta, M. Schmitt, A. Baird, N. Cummins, and B. Schuller, "Performance Analysis of Unimodal and Multimodal Models in Valence-Based Empathy Recognition," in *Workshop Proceedings of the 14th International Conference on Automatic Face & Gesture Recognition, FG 2019*, (Lille, France), IEEE, IEEE, May 2019. 5 pages
 - 32) F. Ringeval, B. Schuller, M. Valstar, N. Cummins, R. Cowie, L. Tavabi, M. Schmitt, S. Alisamir, S. Amiriparian, E.-M. Messner, S. Song, S. Liu, Z. Zhao, A. Mallol-Ragolta, Z. Ren, M. Soleymani, and M. Pantic, "AVEC 2019 Workshop and Challenge: State-of-Mind, Detecting Depression with AI, and Cross-Cultural Affect Recognition," in *Proceedings of the 9th International Workshop on Audio/Visual Emotion Challenge, AVEC 2019*, co-located with the 27th International Conference on Multimedia, MM 2019 (F. Ringeval, B. Schuller, M. Valstar, N. Cummins, R. Cowie, and M. Pantic, eds.), (Niece, France), pp. 3–12, ACM, ACM, October 2019
 - 33) A. Mallol-Ragolta, S. Dhamija, and T. E. Boulton, "A Multimodal Approach for Predicting Changes in PTSD Symptom Severity," in *Proceedings of the 20th International Conference on Multimodal Interaction, ICMI 18*, (Boulder, CO, USA), pp. 324–333, ACM, ACM, October 2018
- #### D) OTHER
- Theses (2):*
- 34) A. Mallol-Ragolta, *Post-Traumatic Stress Disorder Severity Prediction on Web-based Trauma Recovery Treatments Through Electrodermal Activity Measurements*. Master thesis, University of Colorado Colorado Springs, Colorado Springs, CO, USA, July 2018. 149 pages
 - 35) A. Mallol-Ragolta, *Facial shape estimation methods for computing physiological signals with non-invasive techniques*. Bachelor thesis, Universitat Pompeu Fabra, Barcelona, Spain, July 2016. 120 pages
- Abstracts in Conference/Challenge Proceedings (1)*
- 36) L. Stappen, N. Cummins, E.-M. Messner, A. Mallol-Ragolta, H. Baumeister, and B. Schuller, "Attention-based Neural Networks for the Detection of Objective Linguistic Markers in Depressive Spoken and Written Language," in *Proceedings of the 16th International Pragmatics Conference, IPrA 2019*, (Hong Kong, China), p. 759, International Pragmatics Association (IPrA), IPrA, June 2019
- Technical Reports and Preprints (8):*
- 37) V. Karas, M. K. Tellamekala, A. Mallol-Ragolta, M. Valstar, and B. Schuller, "Continuous-Time Audiovisual Fusion with Recurrence vs. Attention for In-The-Wild Affect Recognition," *arxiv.org*, March 2022. 10 pages
 - 38) S. Liu, A. Mallol-Ragolta, E. Parada-Cabeleiro, K. Qian, X. Jing, A. Kathan, B. Hu, and B. Schuller, "Audio Self-Supervised Learning: A Survey," *arxiv.org*, March 2022. 24 pages
 - 39) B. Schuller, A. Batliner, S. Amiriparian, C. Bergler, M. Gerczuk, N. Holz, P. Larrouy-Maestri, S. Bayerl, K. Riedhammer, A. Mallol-Ragolta, M. Pateraki, H. Coppock, I. Kiskin,

- M. Sinka, and S. Roberts, “The ACM Multimedia 2022 Computational Paralinguistics Challenge: Vocalisations, Stuttering, Activity, & Mosquitoes,” *arxiv.org*, May 2022. 5 pages
- 40) A. Mallol-Ragolta, H. Cuesta, E. Gómez, and B. Schuller, “EIHWM-TG: Second DiCOVA Challenge System Report,” *arxiv.org*, October 2021. 4 pages
 - 41) A. Mallol-Ragolta, H. Cuesta, E. Gómez, and B. Schuller, “EIHWM-TG DiCOVA 2021 Challenge System Report,” *arxiv.org*, October 2021. 4 pages
 - 42) D. Aspandi, A. Mallol-Ragolta, B. Schuller, and X. Binefa, “Adversarial-based neural networks for affect estimations in the wild,” *arxiv.org*, January 2020. 5 pages
 - 43) L. Stappen, A. Baird, G. Rizos, P. Tzirakis, X. Du, F. Hafner, L. Schumann, A. Mallol-Ragolta, B. Schuller, I. Lefter, E. Cambria, and I. Kompatsiaris, “MuSe 2020 – The First International Multimodal Sentiment Analysis in Real-life Media Challenge and Workshop,” *arxiv.org*, April 2020. 10 pages
 - 44) F. Ringeval, B. Schuller, M. Valstar, N. Cummins, R. Cowie, L. Tavabi, M. Schmitt, S. Alisamir, S. Amiriparian, E.-M. Messner, S. Song, S. Liu, Z. Zhao, A. Mallol-Ragolta, Z. Ren, M. Soleymani, and M. Pantic, “AVEC 2019 Workshop and Challenge: State-of-Mind, Detecting Depression with AI, and Cross-Cultural Affect Recognition,” *arxiv.org*, July 2019. 11 pages