

## FULL PUBLICATION LIST

### Journal papers

H.-J. Escalante, V. Ponce-López, S. Escalera, X. Baró, A. Morales-Reyes, and J. Martínez-Carranza. **Evolving weighting schemes for the Bag of Visual Words**. Neural Computing and Applications, Volume 28, Issue 5, pp. 925–939, 2015. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

V. Ponce-López, S. Escalera, M. Perez, O. Janés, and X. Baró. **Non-Verbal Communication Analysis in Victim-Offender Mediations**. Pattern Recognition Letters, vol. 67, no. 1, pp. 19-27, 2015. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#) [\[arXiv pre-print\]](#) [\[VideoSample\]](#)

A. Hernandez-Vela, M. A. Bautista, X. Perez-Sala, V. Ponce-López, X. Baro, O. Pujol, C. Angulo, and S. Escalera. **Probability-based Dynamic Time Warping and Bag-of-Visual-and-Depth-Words for Human Gesture Recognition in RGB-D**. Pattern Recognition Letters, 2013, ISSN 0167-8655. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

A. Hernández-Vela, M. Reyes, V. Ponce, S. Escalera. **GrabCut-Based Human Segmentation in Video Sequences**. Sensors 2012, ISSN 1424-8220, vol. 12, num. 11, pp. 15376-15393. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#) [\[Data\]](#)

### Proceeding papers in Conferences and Workshops



V. Ponce-López, T. Burdghart, Y. Sun, S. Hannuna, D. Damen, M. Mirmehdi. **Deep Compact Person Re-Identification with Distractor Synthesis via Guided DC-GANs**. International Conference on Image Analysis and Processing, Lecture Notes in Computer Science, vol. 11751, pp. 488-498, ISBN 978-3-030-30641-0, 2019. [\[Link\]](#) [\[Poster\]](#) [\[BibTeX\]](#)



V. Ponce-López, T. Burdghart, S. Hannuna, D. Damen, A. Masullo, M. Mirmehdi. **Semantically Selective Augmentation for Deep Contact Person Re-Identification**. European Conference on Computer Vision Workshops, Lecture Notes in Computer Science, vol 11130, Springer, 2019. [\[Link\]](#) [\[BibTeX\]](#) [\[Code 1\]](#) [\[Code 2\]](#) [\[arXiv pre-print\]](#) [\[Poster\]](#)



A. Masullo, T. Burdghart, D. Damen, S. Hannuna, V. Ponce-López, M. Mirmehdi. **CaloriNet: From Silhouettes to calorie estimation in private environments**. British Machine Vision Conference (BMVC), 2018. [\[PDF\]](#) [\[arXiv pre-print\]](#) [\[BibTeX\]](#)

P. Fiadino, V. Ponce-López, J.-A. Torrero-Gonzalez, M. Torrent-Moreno. **Call Detail Records for Human Mobility Studies: Taking Stock of the Situation in the “Always Connected Era”**. ACM SIGCOMM 2017 Workshop on Big Data Analytics and Machine Learning for Data Communication Networks, 2017. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

M. Asadi-Aghbolaghi, A. Clapés, M. Bellantonio, H.-J. Escalante, V. Ponce-López, X. Baró, I. Guyon, S. Kasaei, S. Escalera. **A survey on deep learning based approaches for action and gesture recognition in image sequences**. Proceedings of 12th IEEE International Conference on Automatic Face and Gesture Recognition (FG), pp. 476-483, 2017. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

H.-J. Escalante, V. Ponce-López, J. Wan, M.-A. Riegler, B. Chen, A. Clapés, S. Escalera, I. Guyon, X. Baró, Pal Halvorsen, H. Müller, M. Larson **ChaLearn Joint Contest on Multimedia Challenges Beyond Visual Analysis: An Overview**. Proceedings of the International Conference on Pattern Recognition (ICPR) Joint Contest on Multimedia Challenges Beyond Visual Analysis, 2016. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

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B. Chen, S. Escalera, I. Guyon, V. Ponce - López, N. Shah, M. Oliu. **Overcoming Calibration Problems in Pattern Labeling with Pairwise Ratings: Application to Personality Traits**. Proceedings of the European Conference in Computer Vision (ECCV), Workshop on Apparent Personality Analysis, vol. 9915, pp. 419-432, 2016. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

V. Ponce-López, H.J. Escalante, S. Escalera, X. Baró. **Gesture and Action Recognition by Evolved Dynamic Subgestures**. Proceedings of the British Machine Vision Conference (BMVC), pp. 129.1-129.13, 2015. [\[Link\]](#) [\[PDF\]](#) [\[Abstract\]](#) [\[Poster\]](#) [\[BibTeX\]](#) [\[Code\]](#)

H.J. Escalante, J. Martinez, S. Escalera, V. Ponce-López and X. Baró. **Improving Bag of Visual Words Representations with Genetic Programming**. Proceedings of the International Joint Conference on Neural Networks (IJCNN) 2015. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

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A. Hernández, M. A. Bautista, X. Pérez, V. Ponce, X. Baró, O. Pujol, C. Angulo, and S. Escalera. **BoVDW: Bag-of-Visual-and-Depth-Words for Gesture Recognition**. 21st International Conference on Pattern Recognition, 2012, Japan, ISSN 1051-4651, pp. 449-452. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

M. A. Bautista, A. Hernández, V. Ponce, X. Pérez, X. Baró, O. Pujol, C. Angulo, and S. Escalera. **Probability-based Dynamic Time Warping for Gesture Recognition**. International Workshop on Depth Image Analysis, ICPR 2012, Japan, ISSN 0302-9743, vol. 7854, pp. 126-135. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

V. Ponce, S. Escalera, & X. Baró. **Social Signal Analysis in Criminal Mediation Processes**. Advances in Theory and Applications of Computer Vision, CVCR&D Workshop, 2012, vol. 1. [\[PDF\]](#) [\[Poster\]](#)

V. Ponce, M. Reyes, X. Baró, M. Gorga and S. Escalera. **Two-level GMM Clustering of Human Poses for Automatic Human Behavior Analysis**. CVCR&D State of the Art of Research and Development in Computer Vision, CVCR&D Workshop, 2011, ISBN 978-84-938351-5-6, pp. 47-50. [\[PDF\]](#) [\[Poster\]](#)

V. Ponce, M. Gorga, X. Baró, S. Escalera. **Human Behavior Analysis from Video Data using Bag-of-Gestures**. International Joint Conference on Artificial Intelligence, 2011, ISBN 978-1-57735-515-1 vol. 3, pp. 2836-2837. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

V. Ponce, S. Escalera, X. Baró, and P. Radeva. **Automatic Analysis of Non-verbal Communication**. Achievements and New Opportunities in Computer Vision, CVCR&D Workshop 2010, ISBN 978-84-938351-0-1, pp. 105-108. [\[PDF\]](#) [\[Poster\]](#)

## Book Chapters

M. Asadi-Aghbolaghi, A. Clapés, M. Bellantonio, H.-J. Escalante, V. Ponce-López, X. Baró, I. Guyon, S. Kasaei, S. Escalera. **Deep Learning for Action and Gesture Recognition in Image Sequences: A Survey**. Gesture Recognition, The Springer Series on Challenges in Machine Learning book series (SSCML), pp. 539-578, 2017. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

## Technical Reports - White Papers



V. Ponce-López, Paul Hill, Juliet Biggs. **Time-Series Forecasting for Ground Deformation**. Technical Report, University of Bristol, 2019. [\[Poster\]](#)

Yue Sun. **Re-identification in Home Environments using Facial and Appearance Features**. Bachelor of Science Thesis in the Department of Computer Science at the Faculty of Engineering, University of Bristol, 2018. [\[PDF\]](#)

Xiang He. . Master of Science Thesis in the Department of Computer Science at the Faculty of Engineering, University of Bristol, 2018. [\[PDF\]](#)

Atis Elsts, Tilo Burghardt, Dallan Byrne, Dima Damen, Xenofon Fafoutis, Sion Hannuna, Victor Ponce Lopez, Alessandro Masullo, Majid Mirmehdi, George Oikonomou, Robert Piechocki, Emma

Tonkin, Antonis Vafeas, Przemyslaw Woznowski, Ian Craddock. **A Guide to the SPHERE 100 Homes Study Dataset**. University of Bristol Tech. Report, 2018. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

V. Ponce. **Evolutionary Bags of Space-Time Features for Human Analysis**. Ph.D. Thesis, 2016. [\[Link\]](#) [\[PDF\]](#) [\[Slides\]](#)

V. Ponce. **Multi-Modal Human Gesture Recognition combining Dynamic Programming and Probabilistic Methods**. M.Sc. Thesis, 2012. [\[PDF\]](#) [\[Slides\]](#)

V. Ponce, M. Gorga, X. Baró, P. Radeva, and S. Escalera. **Análisis de la expresión oral y gestual en proyectos fin de carrera vía un sistema de visión artificial**. ReVisión, la revista electrónica de la Asociación de Enseñantes Universitarios de la Informática AENUI, 2011, ISSN 1989-1199, vol. 4, num. 1 (In Spanish). [\[Link\]](#) [\[PDF\]](#)

V. Ponce. **Reproducció d'Accions en Vídeo**. B.Sc. Thesis, 2010 (In Catalan). [\[PDF\]](#) [\[Slides\]](#)