

# Dr. Víctor Ponce López

Last update May 19, 2022



## Contact

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London, United Kingdom

## Languages

Catalan ★★★★★(native),  
Spanish ★★★★★(native),  
English ★★★★★(fluent),  
Français ★★★★★  
(basic reading/writing/oral).

## Programming Languages, Libs, Tools, Web and Environments

♥ Python, MATLAB,  
C++/C#/C, R, PyCharm,  
Netbeans, Eclipse, VS/VC++,  
SVN/GIT, Redmine,  $\LaTeX$ , XML,  
PostgreSQL, SQL, MySQL,  
Tableau, Hive, Spark, Hadoop,  
CodaLab, Kaggle, Bash,  
PHP/HTML/CSS/JavaScript;  
**Deep Learning & Computer Vision** libraries and toolboxes:  
♥ Tensorflow, PyTorch, Keras,  
GAN, CNN, LSTM, dlib,  
CUDA+CuDNN, Kinect™ SDK,  
open{CV/Ni/GL}, CNTK+;  
evolutionary computation and  
statistical pattern recognition:  
♥ numpy, matplotlib, sklearn,  
optimtool, gatool, pmtk3,  
deap, pandas, statsmodel.

## OS Preferences

GNU/Linux ★★★★★  
Windows ★★★★★  
MacOS ★★★★★  
Android ★★★★★  
iOS ★★★★★

## short bio

I am a former Research Fellow at the UCL Energy Institute. I am a member of the European Laboratory for Learning and Intelligent Systems (ELLIS) and a Honorary Research Fellow at the Dept. of Computer Science at the University of Bristol. I was a Research Scientist in Eurecat at the Big Data Analytics Unit. I hold a PhD at the the Dept. of Mathematics and Computer Science, University of Barcelona (UB). I received my B.Sc. degree in Computer Science and Engineering at the Faculty of Mathematics of UB, and my M.Sc. degree in Artificial Intelligence at the Polytechnic University of Catalonia. I was affiliated to the Computer Vision Center and the Open University of Catalonia, in the groups HuPBA and SUNAL; and the group Qarma at the Laboratoire d'Informatique Fondamentale, Aix-Marseille Université.

## experience

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|-----------|---|
| 2020–2022 | <b>University College London</b><br><i>Research Fellow in Machine Learning at the UCL Energy Institute</i><br>London, United Kingdom <ul style="list-style-type: none"><li>• <b>Natural Language Processing</b> on Disasters for the Environment &amp; Energy.</li><li>• <b>Time-Series Forecasting</b> of Energy Markets using Deep Neural Networks.</li></ul>   |
| 2017–2020 | <b>University of Bristol</b><br><i>PostDoc Research Associate &amp; Research Fellow at the Visual Information Lab.</i><br>Bristol, United Kingdom <ul style="list-style-type: none"><li>• <b>Time-Series Prediction</b> of Seasonal Ground Surface Deformation.</li><li>• <b>Computer Vision</b> for Human Activity Recognition in Home Healthcare.</li><li>• Domain Adaptation, Self-Supervised Learning, GANs, Person Re-Identification.</li></ul>  |
| past–2017 | <b>Eurecat Technology Center of Catalonia, University of Barcelona, Open University of Catalonia, Computer Vision Center, Dept. of Justice @ GOV of Catalonia, and Barcelona City Council's Dept. of Education, Culture and Welfare</b><br><i>Research Scientist, PostDoc, Collaborations in Research &amp; IT, international PhD stay, 40+ scientific publications and peer-reviews, teaching and material preparation, organization/attendance on international conferences, events, and seminars.</i> <ul style="list-style-type: none"><li>• 4 impact factor journals, 17 conference proceedings, and 1 book chapter.</li><li>• ChaLearn Looking At People collaboration with <b>Microsoft, NVIDIA, Google, Amazon, Disney, Facebook, Orange, MWC-GSMA.</b></li><li>• Research projects on human behavior analysis within real-world domains.</li></ul> |

## education

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| 2012–2016 | <b>Ph.D. in Mathematics and Computer Science</b><br>Faculty of Mathematics, University of Barcelona<br>Dissertation: "Evolutionary Bags of Space-Time Features for Human Analysis." <b>Cum Laude and International Mention.</b>  |
| 2010–2012 | <b>M.Sc in Artificial Intelligence</b><br>Polytechnic University of Catalonia, University of Barcelona, and Rovira i Virgili University.<br>Dissertation: "Multi-Modal Human Gesture Recognition combining Dynamic Programming and Probabilistic Methods." <b>With Honors.</b> |
| 2006–2010 | <b>B.Sc in Computer Science: Systems engineering</b><br>Faculty of Mathematics, University of Barcelona.<br>Dissertation: "Analysis of Oral and Gestural Expression using an Artificial Vision System." <b>With Honors.</b>  |

## extracurricular

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| 2006–Present | <b>Driving license</b>                     |
| 1998–2004    | <b>Musical language and Piano licenses</b> |

## interests

I'm a passionate of diversity in research & technology. My main interests are machine learning and deep pattern recognition to address real-world applications. I follow cutting-edge research and technology to be aware of future trends to come and new social needs for the people.

## • PARTICIPATION IN RESEARCH PROJECTS AND TECHNOLOGICAL TRANSFER:

**Project Title:** Belmont Forum's Collaborative Research Action: Disaster Risk, Reduction and Resilience (DR32019).

**Funding Entity:** UK Research and Innovation (UKRI).

**Participant Entities:** University College London, Qatar Computing Research Institute.

**Duration:** 2020/10/05 to 2021/03/31.

**Project Responsible:** Prof. Catalina Spataru.

**Number of Researchers involved:** >15

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**Project Title:** Energy Open Piazza consortium for smart energy systems innovation.

**Funding Entity:** Dept. for Business, Energy & Industrial Strategy (BEIS).

**Participant Entities:** University College London, University of Sheffield Energy Institute, Energy Systems Catapult, Skanska, and Avison Young, Boost Energy Ventures, Utilismart Corp, and Integrated Environmental Solutions, Unit9.

**Duration:** 2020/10/05 to 2021/02/28.

**Project Responsible:** Prof. Catalina Spataru.

**Number of Researchers involved:** >20

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**Project Title:** Digital Environment for the Analysis and Detection of Ground Surface Deformation.

**Funding Entity:** UK Research and Innovation (UKRI).

**Participant Entities:** University of Bristol, SatSense, TerraFirma, TRE-Altamira.

**Duration:** 2019/05/20 to 2019/12/23.

**Project Responsible:** Juliet Biggs.

**Number of Researchers involved:** >10

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**Project Title:** SPHERE, a Sensor Platform for Healthcare in a Residential Environment.

**Funding Entity:** EPSRC (Engineering and Physical Sciences Research Council), University of Bristol.

**Participant Entities:** IBM, Toshiba, Bristol City Council, Universities of Southampton, Cambridge and Reading, KWMC.

**Duration:** 2017/01/31 to 2022/01/31.

**Project Responsible:** Ian Craddock, Majid Mirmehdi, Dima Damen.

**Number of Researchers involved:** >50

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**Project Title:** eTur 2020.

**Funding Entity:** Centro para el Desarrollo Tecnológico Industrial (CDTI), MINECO, Spanish Government.

**Participant Entities:** Tecnocom, Groupalia, Eurecat, Eureka, Solusoft, Compartia, Zemsania.

**Duration:** from 2017/05/05 to 2017/09/31.

**Project Responsible:** Jesus Carlos Villagra Laso, Jose Mena Roldan, Marc Torrent, Víctor Ponce López.

**Number of Researchers involved:** >10

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**Project Title:** Tourism Management.

**Funding Entity:** Barcelona Council, GSM, and Mobile World Capital.

**Participant Entities:** Barcelona Council, Orange, GSM, MWC, Eurecat, DFRC, D-Lab.

**Duration:** from 2017/02/15 to 2018/04/31.

**Project Responsible:** Marc Torrent Moreno, Bárbara Vallespín Peré.

**Number of Researchers involved:** >10

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**Project Title:** New Technologies for Virtual and Augmented Reality (VR360).  
**Funding Entity:** Eurecat, Government of Catalonia.  
**Participant Entities:** Eurecat Tecnology Center of Catalonia, Computer Vision Center.  
**Duration:** from 2017/04/01 to 2018/12/31.  
**Project Responsible:** Rafael Redondo.  
**Number of Researchers involved:** >10

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**Project Title:** Social Car.  
**Funding Entity:** European Union Horizon 2020 No 636427.  
**Participant Entities:** CETH, MOVENDA, TAXISTOP, SUPSI, UWH, ZIGHT, ABACUS, STRATEGIC STUFF, UNIABDN, IBI Group, FIT, VECTOS, BERMAG, TTS Italia, Eurecat.  
**Duration:** from 2015/09/01 to 2017/11/31.  
**Project Responsible:** Dionisis Kehagias, Andrea Emilio Rizzoli  
**Number of Researchers involved:** >10

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**Project Title:** ChaLearn Looking at People: Apparent Personality Analysis on First Impressions.  
**Funding Entity:** ChaLearn.  
**Participant Entities:** Microsoft Research, NVIDIA, Amazon, Google, Disney Research, Aix-Marseille Université, *Universitat Autònoma de Barcelona* (UAB), *Universitat de Barcelona* (UB), *Universitat Oberta de Catalunya* (UOC).  
**Duration:** from 2014/09/22 to 2016/11/31.  
**Project Responsible:** Isabelle Guyon, Sergio Escalera.  
**Number of Researchers involved:** >20

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**Project Title:** ChaLearn Looking at People: Gesture Challenge.  
**Funding Entity:** European Conference on Computer Vision (ECCV) 2014, ChaLearn.  
**Participant Entities:** Microsoft Research, *Universitat Autònoma de Barcelona* (UAB), *Universitat de Barcelona* (UB), *Universitat Oberta de Catalunya* (UOC).  
**Duration:** from 2013/12/09 to 2014/10/12  
**Project Responsible:** Isabelle Guyon, Sergio Escalera.  
**Number of Researchers involved:** >20

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**Project Title:** Spatio-Temporal Sub-Gesture Definition for Automatic Human Behaviour Analysis.  
**Funding Entity:** FI-DGR 2013. AGAUR, *Generalitat* of Catalonia.  
**Participant Entities:** Open University of Barcelona (UOC).  
**Duration:** from 2013/02/01 until 2016/01/31  
**Project Responsible:** Xavier Baró Solé.  
**Number of Researchers involved:** 5

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**Project Title:** ReMedi: Multi-modal Home Assistive Technology for Dementia and Alzheimer's Diseases.  
**Funding Entity:** Obra Social La Caixa.  
**Participant Entities:** Bosch and Gimpera Foundation (FBG), University of Barcelona.  
**Duration:** from 2012/04/01 until 2013/01/31  
**Project Responsible:** Oriol Pujol Vila.  
**Number of Researchers involved:** 7

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**Project Title:** Human Behaviour Analysis in Victim-Offender Mediations.

**Funding Entity:** Department of Justice of the *Generalitat* of Catalonia.

**Duration:** from 2012/02/01 until 2013/03/31

**Project Responsibles:** Víctor Ponce López, Sergio Escalera Guerrero, Xavier Baró Solé.

**Number of Researchers involved:** 5

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**Project Title:** Analysis of Oral and Gestural Expression using an Artificial Vision System.

**Funding Entity:** University of Barcelona.

**Duration:** from: 2010/06/01 until 2010/11/01

**Project Responsible:** Sergio Escalera, Xavier Baró, Miguel A. Bautista, Víctor Ponce, Verónica Violant.

**Number of Researchers involved:** 8

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## • SCHOLARSHIPS AND GRANTS:

- 2019: Collaboration in research proposals for the **UKRI Grant** from UK Research and Innovation for Research Projects in Digital Environment.
- 2017: Collaboration in research proposals for the **EPSRC and IRC Grants**, UK Engineering and Physical Sciences and International Research Councils, Grant *EP/K031910/1*.
- 2016: **Support in Research and innovation** in partnership with Microsoft Research, Microsoft CodaLab, the Laboratoire de Recherche en Informatique of Paris Sud University, INRIA-Saclay and the Paris-Saclay Center for Data Science (CDS).
- 2015: **European Commission Horizon 2020 (H2020)** granted project SEE.4C under call *H2020-ICT 2015*.

**Grant** to support research projects of consolidated groups by the Ministry of Economy and Competitiveness, **Spanish Government**. *TIN2015-66951-C2-2-R*.

- 2014: **Labex ARCHIMEDE** Grant for a Research Project. Marseille INstitute of MAtematics and Computer Science (MIN-MACS). Laboratoire d'Informatique Fondamentale, Aix-Marseille Université, UMR CNRS 7279.
- 2013: **FI-DGR 2013 Grant for Formation in Research** from the 'Agència de Gestió d'Ajuts Universitaris i de Recerca' (AGAUR), **Generalitat, Catalan Government**. *2013FI-B01037*.

**Grant** to support Spanish research projects of consolidated groups by the Ministry of Economy and Competitiveness, **Spanish Government**. *TIN2013-43478-P*.

- 2012: **PMID Grant for Teaching Innovation Projects** from **University of Barcelona**. Code: *2012PID-UB/152*.

**Grant** to support research projects of consolidated groups by the Ministry of Economy and Competitiveness, **Spanish Government**. *TIN2012-38187-C03-02*.

**CEJFE Grant** for a research project with the **Department of Justice (Generalitat of Catalonia)**. *Center of Legal Studies and Specialized Formation*. Resolution id: *JUS/237/2011*.

**Grant** from *Obra Social La Caixa* for a **Research Project** at the Department of Applied Mathematics and Analysis of the **University of Barcelona**. Grant id: *5800201204001*.

- 2011: **Scholarship** for **Web administration** of the **Faculty of Mathematics** of the University of Barcelona. Code: *1-11PUI*.

**Grant** to support research projects from IMSERSO, Ministry of Sanity, **Spanish Government**. *MEDIMINDER*.

**Grant** to support research and technological projects from RecerCaixa. *REMEDI*.

- 2010: **Collaboration Scholarship for Teaching Innovation Projects** with the Department of Applied Mathematics and Analysis of the **University of Barcelona**. Code: *2-10ESC*.
- 2009: **PMID Grant for Teaching Innovation Projects** from **University of Barcelona**. Code: *2009PID-UB/04*.

• **OTHER PUBLIC AND PRIVATE PROJECTS INVOLVED:**

- 2020-

2022: **Research Fellow** and **Associate Staff** at the University College London.

- 2018-

2021: **PostDoc Research Associate and Honorary Research Fellow** at the University of Bristol.

- 2017-

2019: **Post-Doctoral Research Associate** at the University of Bristol.

- 2016: **Research Scientist** at Eurecat, Technology Centre of Catalonia.

- 2016: **Post-Doc Researcher** at the **Computer Vision Center**, *Universitat Autònoma de Barcelona*.

- 2010: **Software Engineer and IT Services** at the Education Management, Culture and Welfare of the **Barcelona Council**.

• **PEER REVIEWING (Verified by <https://publons.com/a/1202458>) (Year) (#Reviews)**

- IEEE Transactions on Evolutionary Computation 2019(1).
- British Machine Vision Conference (BMVC), 2019(4)
- IEEE Computer Vision and Pattern Recognition, Explanatory Computer Vision Workshop ECVW @ CVPR, 2017(1).
- IEEE Computer Vision and Pattern Recognition, Deep Vision Workshop DV2017 @ CVPR, 2017(1).
- IEEE Transactions on Affective Computing, 2017(2).
- IET Computer Vision 2016(1) – 2017(3).
- On Editorial Board Membership for IEEE Transactions on Affective Computing, 2016.
- IEEE International Conference on Automatic Face and Gesture Recognition (FG), 2016(2)-2017(2)-2018(4)-2019(1).
- IEEE European Conference on Computer Vision (ECCV) Workshops, 2014(2) - 2016 (2).
- IEEE Computer Vision and Pattern Recognition (CVPR) Conference Workshops, 2016 (3).
- IEEE International Conference on Computer Vision (ICCV) Workshops, 2015 (committee member).
- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2015 (5).
- IEEE Transactions on Multimedia, 2014(1).
- Journal of Machine Learning Research (JMLR), 2013(1) - 2014(2).

- **ORGANIZATION AND SCIENTIFIC PROGRAM COMMITTEE (PC) MEMBER:**

- **Member of the European Laboratory for Learning and Intelligent Systems (ELLIS).**
- Mentor at the ImaginChallenge 2016. Obra Social La Caixa.
- ECCV 2016 Workshop ChaLearn Looking at People: First Impressions.
- CVCR&D 2016 Workshop: Computer Vision Center, Research and Development advances.
- ECCV 2014 Workshop ChaLearn Looking at People: Gesture Recognition.
- CCIA 2014 Member of the organization.
- ICCV 2011 Member of the organization.

- **PARTICIPATION IN CONFERENCES AND SEMINARS:**

- Digital Environment Stakeholder Workshop Meeting, 2019, Engineering House, Bristol
- International Conference on Image Analysis and Processing (ICIAP), 2019.
- European Conference on Computer Vision (ECCV) Person-In-Context Workshop, 2018.
- British Machine Vision Association (BMVA) Symposium, Technical meeting in Computer Vision for Smart Environments and Assisted Living.
- Bristol Vision Institute Research Colloquium, 2018. Participant and assistant.
- >10 seminars from the Bristol Vision Institute, Visual Information Lab, and SPHERE, at the University of Bristol. Participation and assistant.
- *Mobile World Congress*, Exhibitor Staff at the Big Data Innovation City (Hall 4), 2017, Barcelona.
- *European Workshop on Reinforcement Learning (EWRL)*, 2016, Barcelona. Assistant.
- *Intel Code Modernization Workshop* 2016, Barcelona. Assistant.
- *Big Data Congress* and *Eurecat Mobile Forum* 2016, Barcelona. Participant and assistant.
- Assistance in *more than 20 seminars* covering different areas in the **Artificial Intelligence** and **Computer Vision** at the Computer Vision Center of the UAB in the range of years between 2010-2016.
- Deep learning *Seminar meetups* at Polytechnic University of Catalonia (UPC) and Pompeu Fabra University (UPF), 2016.
- *British Machine Vision Conference (BMVC) 2015*. Conference assistant and participant.
- Seminars and workshops held by QARMA group at *Centre de Mathématiques et Informatique (CMI). Laboratoire d'Informatique Fondamentale*, Aix-Université de Marseille, 2014.

- *European Conference on Computer Vision (ECCV) 2014*. Conference assistant and participant. Workshop ChaLearn Looking At People challenge organizer.
- *Congrés Internacional de l'Associació Catalana d'Intel·ligència Artificial (CCIA) 2014*. Facultad de Matemáticas, Universitat de Barcelona. Member of the Committee.
- *International Conference on Multimodal Interaction (ICMI) 2013*. Coogee Bay Hotel, Sydney, Australia. Conference assistant and participant.
- *First UOC International Research Symposium RDI 2013*. Conference assistant and participant.
- *ENS/INRIA Computer Vision and Machine Learning Summer School 2013*. Assistant and participant.
- *Mobile World Congress (MWC) 2013*. Exhibitor Attendee.
- *International Conference on Pattern Recognition (ICPR) 2012*. Tsukuba Science City, Japan. Conference assistant and participant.
- *II Day of Restorative Justice 2012: Experiències restauratives en les comunitats autònomes. Centre d'Estudis Jurídics i Formació Especialitzada (CEJFE), Generalitat of Catalonia*.
- *June Seminar 2012: Humans like watching humans: recent advances in human-centered video analysis*. Assistant at the Computer Vision Center.
- *Mobile World Congress (MWC) 2012*. Congress assistant.
- *International Conference on Computer Vision (ICCV) 2011*. Member of the Organization Committee and conference assistant.
- *Mediation Talk 2012: Gestural communication in mediation sessions*. Center of Legal Studies and Specialized Information, Department of Justice of the Generalitat of Catalonia.
- *Workshop CVCR&D 2011*. Assistant and participant at the Computer Vision Center. Autonomous University of Barcelona (UAB).
- *International Joint Conference on Artificial Intelligence (IJCAI) 2011*. Conference assistant participant at the *Doctoral Consortium*.
- *July Seminar 2011: Uncertainty in Artificial Intelligence*. Assistant at the Computer Vision Center.
- *Mobile World Congress (MWC) 2011*. Congress assistant.
- *December Seminar 2010: Facial Behaviour Understanding*. Assistant at the Computer Vision Center.
- *Workshop CVCR&D 2010*. Assistant and Participant at the Computer Vision Center.
- *July Seminar 2010: Recognizing Human Actions using Spatio-temporal Interest Points*. Assistant at the Computer Vision Center.



- **TEACHING:**

- Co-supervision and marking M.Sc. students at the University College London, 2020-2022.
- Co-supervision of B.Sc and M.Sc students at the University of Bristol, 2017-2018.
- Support and preparation of teaching material for the Computer Vision course in the Computer Science degree at the Faculty of Mathematics. University of Barcelona, 2014.
- Co-supervision of Student's B.Sc. Thesis at University of Barcelona, 2013.
- Grant for Teaching Innovation Projects with code 2012PID-UB/152 from the University of Barcelona.
- Artificial Intelligence *Xerrades Taller* (Working Talks) at the Faculty of Mathematics (University of Barcelona). Practical Works, Title: "Artificial Intelligence: How do the machines see?" January 2011. Organizer: Dr. Sergio Escalera.
- ITACA UAB. Days for presenting the Complex Problems and activities in the '*Campus Ítaca*' at the Autonomous University of Barcelona. 2010-2015.

- **HONORS, AWARDS AND OTHER MERITS:**

- **Author** of **7 impact factor journals**, **17 conference proceedings**, **1 book chapter**, and **technical reports**.
- **>40 verified peer-reviews** in impact factor journals and international conference proceedings.
- **Runner up** for research fellowship proposals between 2018-2020: 1851, EPSRC Platform Grants, Elizabeth Blackwell Institute for Health Research, Royal Academy of Engineering Research Fellowship, Royal Society University Research Fellowships, Ramon y Cajal, and La Caixa Junior Leadership incoming grants.
- **Runner up** for the CERCA Pioneer awards 2016.
- **Runner up** for the **Big Data Talent Awards**, Barcelona Big Data Congress 2016.
- **International Mention** and **Cum Laude** distinction for the **Ph.D. Thesis**.
- Obtention of **Honors** both for **B.Sc.** and **M.Sc. Theses**.
- **Award for the best Spanish Bachelor Project** by the "*Jornadas de Enseñanza Universitaria de la Informática (JENUI) 2010*" and posterior publication at the *ReVisión* Journal of the "*Asociación de Enseñantes Universitarios de la Informática (AENUI)*", with the **work for automatically determine the success of a communication**.

### Journal papers



V. Ponce-López, C. Spataru. **Social Media Behaviour Analysis in Disaster-Response Messages of floods and heat waves via Artificial Intelligence**. Accepted at Journal of Computer and Information Science, 2022. [\[arXiv pre-print\]](#) [\[BibTeX\]](#)



V. Ponce-López, C. Spataru. **Social Media Data Analysis Framework for Disaster Response**. Under Review at Discover Artificial Intelligence journal, 2022. [\[RS pre-print\]](#) [\[VideoSample\]](#)

P. Hill, J. Biggs, V. Ponce-López, D. Bull. **Time-Series Prediction Approaches to Forecasting Deformation in Sentinel-1 InSAR Data**. Journal of Geophysical Research: Solid Earth, vol. 126(3), pp. 1–17, 2021. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

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. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

V. Ponce-López, B. Chen, M. Oliu, C. Corneanu, A. Clapés, I. Guyon, X. Baró, H. J. Escalante, S. Escalera. **ChaLearn LAP 2016: First Round Challenge on First Impressions - Dataset and Results**. Proceedings of the European Conference in Computer Vision (ECCV), Workshop and Challenge on Apparent Personality Analysis, pp. 400-418, 2016. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

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. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

S. Escalera, X. Baró, J. González, M. Bautista, M. Madadi, M. Reyes, V. Ponce-López, H. Escalante, J. Shotton, I. Guyon. **ChaLearn Looking at People Challenge 2014: Dataset and Results**. ECCV ChaLearn LAP Workshop, vol. 1, pp. 459-473, 2014. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

V. Ponce-López, S. Escalera, and X. Baró. **Multi-modal Social Signal Analysis for Predicting Agreement in Conversation Settings**. International Conference on Multimodal Interaction, Sydney, ISBN 978-1-4503-2129-7, pp. 495-502, 2013. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

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. [\[Link\]](#) [\[PDF\]](#) [\[BibTeX\]](#)

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