Dr. Víctor Ponce López



Contact

vponcelop<at>gmail.com vponcelo.github.io London, United Kingdom

Languages

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

Programming, Libs, Methods, Tools and **Environments**

Python, MATLAB, C++/C#/C, R, PyCharm, Netbeans, Eclipse, VS/VC++, SVN/GIT/Redmine, LATEX, PostgreSQL, SQL, Tableau, Hive, Spark, Hadoop, CodaLab, Kaggle, Bash, PHP/HTML/JS, Web3;

Deep Learning & Computer

Vision libraries and toolboxes: PyTorch, Keras, Tensorflow, GAN, CNN, LSTM, dlib, CUDA+CuDNN, Kinect™SDK, open{CV/NI/GL}, CNTK+; evolutionary computation and statistical pattern recognition: pandas, numpy, sklearn, optimtool, gatool, pmtk3, deap, matplotlib, statsmodel.

OS Preferences

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

short bio

I am a Senior Research Fellow at the UCL dept. of Medical Physics and Cancer Institute, and former RF at the dept. of Computer Science and the Energy Institute. I am a member of the European Laboratory for Learning and Intelligent Systems ELLIS and a former Researcher at the University of Bristol. I was a Research Scientist at the Big Data & Data Science unit, EureCat Technology Centre. I hold a PhD from the Dept. of Mathematics and Computer Science, University of Barcelona. I received my BSc degree in Computer Science and Engineering at the UB Faculty of Mathematics, and my MSc degree in Artificial Intelligence at the Polytechnic University of Catalonia. I was a visiting researcher at the Laboratoire d'Informatique Fondamentalle, Aix-Marseille Université. I am a former member of HuPBA and Alwell at the Computer Vision Center and the Open University of Catalonia.

experience

2020-present **University College London**

London, United Kingdom

Senior Research Fellow in Artificial Intelligence for Healthcare

- Computer Vision & Feature Fusion in tumour classification of ST sarcomas.
- Large Language Models in online search activity for early detection of Cancer.
- NLP & Machine Learning for Disaster Response, Environment & Resource management; Time-Series Forecasting in Energy markets using Deep Neural Networks.

2017-2020 **University of Bristol**

Bristol, United Kingdom

- Research Fellow & Honorary Research Associate at the Visual Information Lab.
 - Time-Series Prediction of Seasonal Ground Surface Deformation using DL.
- Computer Vision for Human Activity Recognition in Home Healthcare.

past-2017 Eurecat Technology Center, University of Barcelona, Open University of Catalonia, Computer Vision Center, Dept. of Justice @ GOV Catalonia, Barcelona City Council's Dept. of Education, Culture and Welfare

> Research Scientist, PostDoc, Collaborations in Research & IT, international PhD stay, 40+ scientific publications and peer-reviews, teaching and material preparation, organization/attendance on international conferences, events, and seminars.

- 8 impact factor journals, 17 conference proceedings, and 1 book chapter.
- · ChaLearn Looking At People collaboration with Microsoft, NVIDIA, Google, Amazon, Disney, Facebook, Orange, MWC-GSMA.
- Research projects on human behavior analysis for real-world applications.

education

2012-2016 Ph.D. in Mathematics and Computer Science

Faculty of Mathematics. University of Barcelona

Dissertation: "Evolutionary Bags of Space-Time Features for Human Analysis." Cum

Laude and International Mention.

2010-2012 M.Sc in Artificial Intelligence

Polytechnic University of Catalonia, University of Barcelona, and Rovira i Virgili University.

Dissertation: "Multi-Modal Human Gesture Recognition combining Dynamic Program-

ming and Probabilistic Methods." With Honors.

2006-2010 **B.Sc in Computer Science: Systems engineering**

Faculty of Mathematics, University of Barcelona.

Dissertation: "Analysis of Oral and Gestural Expression using an Artificial Vision Sys-

tem." With Honors.

extracurricular

Licenses/Hobbies Driving license; former Musician; former Martial Artist.

interests

I am a passionate of science & technology. My research interests are deep learning, multimodal feature fusion, and generative AI. I like to be in the vanguard of cutting-edge technology to address real-world problems and applications in areas with high socioeconomic impact.