Miquel Perelló Nieto

290b Fishponds Road, BS5 6RA, Bristol, UK +44 (0) 7541 92 92 68 • perellonieto@gmail.com www.perellonieto.com

Education

Ph.D. in Computer Science

2016 – Curr Bristol, UK

University of Bristol

- Learning hierarchical features using new semi-supervised learning techniques.

• M.Sc. in Machine Learning and Data Mining

2013 - 2015

Aalto University School of Science

Espoo, Finland

 Thesis "Merging chrominance and luminance in early, medium and late fusion using Convolutional Neural Networks" with distinction.

• M.Sc. in Artificial Intelligence

2012 - 2015

Consortium of three universities:

Catalonia, Spain

Technical University of Catalonia, University of Barcelona, and Rovira i Virgili University

- Information retrieval, Robotics, Computer vision, Computational intelligence

• B.Sc. in Technical Engineer in Computer Systems

2007 - 2012

Barcelona School of Informatics at the Technical University of Catalonia

Barcelona, Spain

- Thesis "Design of a platform to test distributed control systems" with distinction.

Vocational Training in Development of electronic devices

2004 - 2006

Escola del treball

Barcelona, Spain

• High school degree with specialisation on Science and Technology Col·legi la Mercè - Martorell

2002 - 2004

Research project on "Sub-atomic world and particle accelerators".

Martorell, Spain

Publications

- 1. Human Activity Recognition Based on Dynamic Active Learning Bi, H, Perello Nieto, M, Santos-Rodriguez, R & Flach, PA. 2020, IEEE Journal of Biomedical and Health Informatics.
- 2. Recycling weak labels for multiclass classification Perello Nieto, M., Santos-Rodriguez, R., Garcia-Garcia D., Cid-Sueiro, J. 2020, Journal of Neurocomputing (Volume 400, pp. 206-215).
- 3. Beyond temperature scaling: Obtaining well-calibrated multiclass probabilities with Dirichlet calibration Kull, M., Perello Nieto, M., Kängsepp, M., Silva Filho, T., Song, H., Flach, P. 2019, In Advances in Neural Information Processing Systems (pp. 12295-12305).
- 4. HyperStream: a Workflow Engine for Streaming Data Diethe, T., Kull, M., Twomey, N., Sokol, K., Song, H., Perello-Nieto, M., Tonkin, E. & Flach, P., 7 Aug 2019, In: arXiv.
- Releasing eHealth analytics into the wild: Lessons learnt from the SPHERE project Diethe, T, Nieto, MP, Tonkin, E, Holmes, M, Sokol, K, Twomey, N, Kull, M, Song, H & Flach, P 2018, KDD'18: Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining. Association for Computing Machinery (ACM), pp. 243-252
- Perelló-Nieto, M., Santos-Rodríguez, R. and Cid-Sueiro, J.
 Adapting Supervised Classification Algorithms to Arbitrary Weak Label Scenarios, in Advances in Intelligent Data Analysis XVI: 16th International Symposium, IDA 2017, London, UK, October 26–28, 2017, Proceedings. Springer Verlag, pp. 247-259

- 7. Perelló-Nieto, M., Silva Filho, T.M., Kull, M. and Flach, P.

 Background Check: A general technique to build more reliable and versatile classifiers, in IEEE 16th International Conference on Data Mining (ICDM2016), Barcelona, Spain, Dec., 2016.
- 8. Fuertes, J. M., Villà, R., Ayza, J., Mars, P., Martí, P., Velasco, M., Yepez, J., Torres, G., Perelló, M. Hands-on Course in Networked Control Systems, Spain. In 20th Mediterranean Conference on Control and Automation (MED2012), Barcelona, Spain, July, 2012.
- 9. Fuertes, J. M., Villà, R., Ayza, J., Mars, P., Martí, P., Velasco, M., Yepez, J., Torres, G., Perelló, M. **Design of a Hands-on Course in Networked Control Systems** XV Jornadas de Tiempo Real, Santander, Spain, January, 2012.

Work experience

• Research Associate 2017 – Curr

University of Bristol, Department of Electrical and Electronic Engineering

Bristol, UK

Bristol, UK

- Project SPHERE a Sensor Platform for HEalthcare in a Residential Environment
- Granted by EPSRC IRC Engineering and Physical Science Research Council an Interdisciplinary Research Collaboration

• Research Associate 2016 – 2017

University of Bristol, Department of Engineering Mathematics

Activity recognition using multivariate time series modeling

• Research Assistant 2016 – 2016

Université de Strasbourg, ICube Laboratory

Strasbourg, France

- Project REFRAME Rethinking the Essence, Flexibility and Reusability of Advanced Model Exploitation
- Granted by CHIST-ERA European Coordinated Research on Long-term Challenges in Information and Communication Sciences & Technologies ERA-Net

• Research Assistant 2015 – 2016

University of Bristol, Intelligent Systems Laboratory

Bristol, UK

- REFRAME project granted by CHIST-ERA

• Research Assistant

Aalto University School of Science

2014 – 2015

Espoo, Finland

- Unsupervised Learning of Multiple Languages Using Recurrent Neural Networks
- On the use of Convolutional Neural Networks for spatio-temporal feature extraction

• Software Designer/Developer & Systems Administrator

FACERAS, S.L.

2010 – 2013

Barcelona, Spain

- Development of an access control system along several buildings of Barcelona.

• Installer & Technical Service Manager 2006 – 2010

DN Electrónic 2002, S.A. Martorell, Spain

Other activities

- PyData Bristol Meetup co-organiser 2017-Present
- Attended Machine Learning Summer School 2018
- Group facilitator at a Data Study Group 2019 (The Alan Turing Institute)

- Reviewer at Neurcomputing 2020-Present
- Program Committee member ECML-PKDD 2020-Present
- Reviewer at SafeAl 2021