# Miquel Perelló Nieto

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### 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

### Research interests

- Machine Learning
- Artificial Intelligence
- Semi-supervised learning
- Classifier calibration
- Classifier confidence
- Weak labels

- Anomaly detection
- Bayesian modeling
- Deep Learning

### **Publications**

- 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
- 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.
- 3. 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.

4. 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

- 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

Bristol, UK

- 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

2014 - 2015

Aalto University School of Science

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