Fco. Javier Marín Tur

Contact Information	Office: 32-D475D 32 Vassar Street, Cambridge 02139, MA, USA	*e-mail:* jmarin@csail.mit.edu *mobile:* +1 (857) 352-8659

Citizenship   Spanish

Research Interests   Computer Vision, Deep Learning, Cross-modal learning, Random Subspace Methods

Education

PhD in Computer Vision (Doctor Europeus/Cum laude)   **2013**
Universitat Autònoma de Barcelona, Spain

- Thesis title: Pedestrian Detection Based on Local Experts
- Advisor: Professor Antonio M. López
- Area of Study: Computer Vision for Advanced Driver Assistance Systems
- Scholarship: FPI Spanish government grant

MSc in Artificial Intelligence and Computer Vision   **2009**
Universitat Autònoma de Barcelona, Spain

- Dissertation title: Virtual Learning for Real Testing

Postgraduate Certificate in Education (Mathematics)   **2008**
Universitat de les Illes Balears, Spain

***Licenciatura* in Mathematics (5 year studies)**   **2007**
Universitat de les Illes Balears, Spain

Programs & Courses

Kaufman Teaching Certificate Program   **2017**
Massachusetts Institute of Technology, United States of America

Leadership and Management Skills Course for Scientists   **2017**
Massachusetts Institute of Technology, United States of America

- Developed and conducted by hfp consulting

Interships & Visits

Visiting researcher scholar   **2017**
Social Computing at **QCRI**, Qatar

- Objective: To collaborate with the Social Computing team
- Advisor: Dr. Ingmar Weber

PhD internship   **2012**
MMP group at **RWTH Aachen University**, Germany

- Objective: To develop a robust part-based pedestrian detector
- Advisor: Professor Bastian Leibe

PhD internship   **2011**
PR group at **Bangor University**, United Kingdom

- Objective: To develop a general approach for handling partial occlusions
- Advisor: Professor Ludmila I. Kuncheva

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PROFESSIONAL
EXPERIENCE

Post-doctoral research associate   **2016-Present**
MIT CSAIL , USA

- Learning cross-modal embeddings for (text) cooking recipes and food images. Using machine learning to understand health habits from social media images and content.

Algorithm Development Engineer, Camera / Driver Assistance   **2015-2016**
Delphi Deutschland GmbH , Germany

- Lane departure warning and pedestrian detection.

Researcher and Project Manager   **2013-2015**
Starlab, Spain
Project management, proposal redaction and software development in private and public European and local projects (FP7, ESA, ACCIO).

- Project management and consortium coordination (**http://www.owasis.co.uk**).
- Project management, design and implementation of an operational service for jellyfish prediction in the Mediterranean based on in-situ observations, oceanic data and models and learning algorithms (**www.star2earth.com/starjelly**).
- Design and implementation of a vision-based emotion recognition system (**www.beaming-eu.org**).
- Design and implementation of an EEG-ECG biometric system robust to spoofing attacks (**https://www.tabularasa-euproject.org**).
- Design and implementation of an EEG-based diagnosis system for neurodegenerative diseases (**MJFF**).

Lecturer, Computer Science Department   **2014-2016**
Universitat Autònoma de Barcelona, Spain

- Master in Computer Vision: Ensemble methods 2 - Random forests

Assistant Professor, Computer Science Department   **2010-2013**
Universitat Autònoma de Barcelona, Spain

- Subjects: Artificial Intelligence II and Software Engineering

JOURNALS

Occlusion Handling via Random Subspace Classifiers for Human Detection
J. Marín, D. Vázquez, A. M. López, J. Amores & L. I. Kuncheva
In *IEEE Transactions on Systems, Man, and Cybernetics-part B: Cybernetics*, 2014

Virtual and Real Adaptation for Pedestrian Detection
D. Vázquez, A. M. López, J. Marín, D. Gerónimo & D. Ponsa
In *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 2014

Learning a Part-based Pedestrian Detector in Virtual World
J. Xu, D. Vázquez, A. M. López, J. Marín & D. Ponsa
In *IEEE Transactions on Intelligent Transportation Systems*, 2014

CONFERENCES

Learning Cross-modal Embeddings for Cooking Recipes and Food Images
A. Salvador, N. Hynes, Y. Aytar, J. Marín, F. Ofli, I. Weber, A. Torralba
In *30th IEEE Conference on Computer Vision and Pattern Recognition*, 2017

Face-to-BMI: Using Computer Vision to Infer Body Mass Index on Social Media
E. Kocabey, M. Camurcu, F. Ofli, Y. Aytar, J. Marín, A. Torralba, I. Weber
In *11TH International AAAI Conference on web and social media*, 2017

Advanced Machine Learning for classification of EEG traits as Parkinsons biomarker
J. Marín, A. Soria-Frisch, D. Ibáñez, S. Dunne, C. Grau, G. Ruffini, J. Rodrigues-Brazète, R. Postuma, J. Gagnon, J. Montplaisir & A. Pascual-Leone
In *Neuroinformatics Conference*, 2014

Random Forests of Local Experts for Pedestrian Detection
J. Marín, D. Vázquez, J. Amores, A. M. López & B. Leibe
In *14th IEEE International Conference on Computer Vision*, 2013

Learning a Multiview Part-based Model in Virtual World for Pedestrian Detection
J. Xu, D. Vázquez, A. M. López, J. Marín, & D. Ponsa
In *IEEE Intelligent Vehicles Symposium*, 2013

Cool world: domain adaptation of virtual and real worlds for human detection using active learning
D. Vázquez, A. M. López, D. Ponsa, & J. Marín
In *Neural Information Processing Systems Domain Adaptation Workshop*, 2011

Virtual Worlds and Active Learning for Human Detection
D. Vázquez, A. M. López, D. Ponsa, & J. Marín
In *13th International Conference on Multimodal Interaction*, 2011

Learning Appearance in Virtual Scenarios for Pedestrian Detection
J. Marín, D. Vázquez, D. Gerónimo, & A. M. López
In *23rd IEEE Conference on Computer Vision and Pattern Recognition*, 2010

BOOK CHAPTERS

Pedestrian detection: exploring virtual worlds
J. Marín, D. Gerónimo, D. Vázquez, & A. M. López
In *Handbook of Pattern Recognition: Methods and Applications*, i-Concept Press, 2012

PATENTS

Image Processing System to Detect Object of Interest
F. G. Rajabizadeh, Y. Su, J. Marín, & A. Colombo
EU Patent application number: EP16175330.6, filled June 2016.
Applicant: Delphi Technologies, Inc.

SEMINARS

Pedestrian Detection: Learning from Virtual Scenarios **2011**
Bangor University, United Kingdom

SUPERVISION	Co-supervision research assistant Nazia Attari Co-advisors: Dr. Ferda Ofli and Dr. Sanjay Chawla QCRI, Doha, Qatar	**2017**
	Co-supervision PhD student Farzin Ghorban Rajabizadeh Co-advisors: Dr. Alessandro Colombo and Dr. Yu Su Delphi Deutschland GmbH, Wuppertal, Germany	**2016**
VOLUNTEERING ACTIVITIES	International Conference in Computer Vision (ICCV) Barcelona, Spain	**2011**
	Eurographics Conference Bangor, United Kingdom	**2011**
	Proves Cangur (Le Kangourou sans Frontières) Mallorca, Spain	**2006**

TECHNICAL SKILLS **Programming**: C/C++, Python, Matlab, PyTorch, MatConvNet
Applications/IDE: Visual Studio, Qt Creator, ENVI, SVNTortoise, LaTeX, MS Office, Freehand, Fireworks and Corel Draw
Operating Systems: Windows, OS X, and Linux

LANGUAGES	**Spanish**: mother tongue **Catalan**: mother tongue	**English**: fluent written and oral **French**: good written and oral

PERSONAL INTERESTS   Black belt in karate, Brazilian jiu-jitsu, running races
Folkloric dancer

REFERENCES   Available upon request