

Francisco M. Castro

PERSONAL DATA

PLACE AND DATE OF BIRTH: Córdoba, Spain | 14 July 1991
EMAIL: fcastro@uma.es

EDUCATION

- SEPTEMBER 2015 - CURRENT **PH.D. IN COMPUTER SCIENCE**
University of Málaga, Málaga, Spain
Thesis: Event detection in videos, focusing on gait recognition
Advisors: Manuel Jesús Marín-Jiménez and Nicolás Guil
- SEPTEMBER 2014 - JULY 2015 **MASTER OF SOFTWARE ENGINEERING AND ARTIFICIAL INTELLIGENCE**
University of Málaga, Málaga, Spain
Master Thesis: Improving gait recognition with bagging and random subspaces for SVM
Advisors: Manuel Jesús Marín-Jiménez and Nicolás Guil
Mark: 9.0/10.0
- SEPTEMBER 2012 - JULY 2014 **ENGINEERING DEGREE IN COMPUTER SCIENCE**
University of Córdoba, Córdoba, Spain
Degree Project: Gait recognition using dense trajectories and fisher vectors
Advisor: Manuel Jesús Marín-Jiménez
Mark: 9.36/10.0
- SEPTEMBER 2009 - JULY 2012 **TECHNICAL ENGINEERING DEGREE IN COMPUTER SCIENCE**
University of Córdoba, Córdoba, Spain
Degree Project: Photo gallery for Android with face recognition
Advisor: Manuel Jesús Marín-Jiménez
Mark: 8.57/10.0

LANGUAGES

ENGLISH: B2
SPANISH: Mothertongue

TECHNICAL SKILLS

PROGRAMMING LANGUAGES C/C++, Java, Matlab, Python

LIBRARIES VLFeat, MatConvNet, Caffe, OpenCV, Weka

OPERATING SYSTEMS Linux, Windows

WORK EXPERIENCE

JANUARY 2016 - CURRENT	PH.D. GRANT University of Málaga, Málaga, Spain Task: Event detection in videos, focusing on gait recognition Advisors: Manuel Jesús Marín-Jiménez and Nicolás Guil
SEPTEMBER 2014 - DECEMBER 2015	RESEARCHER University of Málaga, Málaga, Spain Task: Gait-based people identification Advisors: Manuel Jesús Marín-Jiménez and Nicolás Guil
SEPTEMBER 2013 - JULY 2014	NATIONAL GRANT FOR RESEARCH INITIATION University of Córdoba, Córdoba, Spain Task: Gait-based people identification Advisor: Manuel Jesús Marín-Jiménez
SEPTEMBER 2012 - JULY 2013	COLLABORATOR STUDENT IN RESEARCH TASKS University of Córdoba, Córdoba, Spain Task: Statistical model development for combining detections of the same subject in video sequences Advisor: Manuel Jesús Marín-Jiménez

PUBLICATIONS

- [1] F. M. Castro, M. Marín-Jiménez, and R. Medina-Carnicer, "Pyramidal Fisher Motion for multiview gait recognition," in *Proceedings of the International Conference on Pattern Recognition*, pp. 1692–1697, 2014.
- [2] F. M. Castro, Marín-Jiménez, and N. Guil, "Empirical study of audio-visual features fusion for gait recognition," in *Proceedings of the International Conference on Computer Analysis of Images and Patterns*, pp. 727–739, 2015.
- [3] M. J. Marín-Jiménez, F. M. Castro, A. Carmona-Poyato, and N. Guil, "On how to improve tracklet-based gait recognition systems," *Pattern Recognition Letters*, vol. 68, Part 1, pp. 103 – 110, 2015.
- [4] F. M. Castro, M. J. Marín-Jiménez, and N. Guil, "Multimodal features fusion for gait, gender and shoes recognition," *Machine Vision and Applications*, pp. 1–16, 2016.
- [5] F. M. Castro, M. J. Marín-Jiménez, N. Guil, and N. P. de la Blanca, "Automatic learning of gait signatures for people identification," in *International Work-Conference on Artificial Neural Networks*, pp. 257–270, Springer, 2017.
- [6] F. M. Castro, M. J. Marín-Jiménez, N. G. Mata, and R. Muñoz-Salinas, "Fisher motion descriptor for multi-view gait recognition," *International Journal of Pattern Recognition and Artificial Intelligence*, vol. 31, no. 01, p. 1756002, 2017.
- [7] F. M. Castro, M. J. Marín-Jiménez, N. Guil, S. López-Tapia, and N. P. de la Blanca, "Evaluation of cnn architectures for gait recognition based on optical flow maps," *BIOSIG 2017*, 2017.
- [8] M. Marín-Jiménez, F. Castro, N. Guil, F. de la Torre, and R. Medina-Carnicer, "Deep multi-task learning for gait-based biometrics," in *Image Processing (ICIP), 2017 IEEE International Conference on*, pp. 106–110, IEEE, 2017.
- [9] F. M. Castro, N. Guil, M. J. Marín-Jiménez, J. Pérez-Serrano, and M. Ujaldón, "Energy-based tuning of convolutional neural networks on multi-gpus," *Concurrency and Computation: Practice and Experience (to appear)*.
- [10] F. M. Castro, M. J. Marín-Jiménez, N. Guil, C. Schmid, and K. Alahari, "End-to-end incremental learning," in *European Conference on Computer Vision (ECCV), (to appear)*, 2018.

OTHER RESEARCH TASKS

- REVIEWER IEEE Transactions on Circuits and Systems for Video Technology, 2016
- REVIEWER International Conference on Computer Analysis of Images and Patterns, 2015
- INTERNSHIP 3 months internship in the team Thoth at Inria Grenoble. Advisors: Karteek Alahari and Cordelia Schmid