Francisco Penedo Álvarez

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1 Contact Information

- Email: contact@franpenedo.com
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2 Education

2014-2020	**PhD**, BU Robotics Lab, Division of Systems Engineering, College of Engineering, Boston University, **Advisor: Prof PhD Calin Belta**, *Systems Engineering*. Thesis: *Formal Methods for Partial Differential Equations*
2009-2014	**Bachelor**, Polytechnic School, Autonomous University of Madrid, *Computer Science*
2009-2014	**Bachelor**, College of Science, Autonomous University of Madrid, *Mathematics*

3 Fellowships and Awards

BU Dean's Fellow	2014-2015, from the Division of Systems Engineering, College of Engineering, Boston University.
Best Poster	2011, in the XXXII Control Engineering Days in Sevilla. Awarded best poster of the Intelligent Control Thematic Group from the Control Engineering Spanish Committee (CEA).
Introduction to Research	2010-2014, from the Spanish National Research Council (CSIC).

Excellence Schollarship	2010-2013, from the Community of Madrid. Awarded to the best undergraduate students (approximately those on the 1%) in any university of the Community of Madrid. This award is exclusively based on academic performance during the previous academic year.
Graduated with Honours in High School	2009, from the IES nº1 of O Carballiño.

4 Publications

- Penedo, F., H. Park, and C. Belta. "Control Synthesis for Partial Differential Equations from Spatio-Temporal Specifications." In 2018 IEEE Conference on Decision and Control (CDC), 4890–95, 2018. https://doi.org/10.1109/CDC.2018.8619313.

- Bombara, Giuseppe, Cristian-Ioan Vasile, Francisco Penedo, Hirotoshi Yasuoka, and Calin Belta. "A Decision Tree Approach to Data Classification Using Signal Temporal Logic." In Proceedings of the 19th International Conference on Hybrid Systems: Computation and Control, 1–10. HSCC '16. New York, NY, USA: ACM, 2016. https://doi.org/10.1145/2883817.2883843.

- Penedo, Francisco, Cristian-Ioan Vasile, and Calin Belta. "Language-Guided Sampling-Based Planning Using Temporal Relaxation." In International Workshop on the Algorithmic Foundations of Robotics, 2016.

- Penedo, Francisco, Rodolfo E. Haber, Agustín Gajate, and Raúl M. del Toro. "Hybrid Incremental Modeling Based on Least Squares and Fuzzy K-NN for Monitoring Tool Wear in Turning Processes." IEEE Transactions on Industrial Informatics 8, no. 4 (November 2012): 811–18. https://doi.org/10.1109/TII.2012.2205699.

5 Talks

2 June 2011	"Hybrid incremental modeling based on least squares and fuzzy K-NN. Design and evaluation" at VII CEA Symposium of Intelligent Control in Logroño, Spain.

6 Research Experience

2015-2020	**Research Assistant**, BU Robotics Lab, Division of Systems Engineering, College of Engineering, Boston University.
2013-2014	**Research Assistant**, C4LIFE group, Control Engineering and Robotics Center (CAR), Spanish National Research Council (CSIC).
2011-2013	**Introduction to Research Fellow**, C4LIFE group, Control Engineering and Robotics Center (CAR), Spanish National Research Council (CSIC).

7 Teaching

2016	**Teaching Assistant**, Boston University, *Introduction to Computer Aided Design (CAD) & Machine Components (ME359)*
2015	**Teaching Assistant**, Boston University, *Introduction to Linear Algebra for Engineers (EK102 B1)*

8 Skills

8.1 Languages

English	Fluent in spoken and written English.
Spanish	Native language.
Galician	Native language.
Japanese	Basic knowledge.

8.2 Computer Skills

Programming languages	Python, Java, C.
Frameworks	numpy, scipy, matplotlib.