

Curriculum Vitæ

Jaime Leonardo Bobadilla

EDUCATION

Ph.D., 2008 - present, [Department of Computer Science, University of Illinois at Urbana-Champaign, USA](#)

Major: Computer Science;

Research advisor: [Professor Steven LaValle](#)

M.S. in Statistics, National University of Colombia, Bogotá, Colombia. 2007

B.S. in Computer Engineering, National University of Colombia, Bogotá, Colombia 2005.

RESEARCH INTERESTS

Robotics, Cyber-Physical Systems, Artificial Intelligence, Applied Statistics,, Computational Biology

AWARDS

2006-2007 Outstanding Graduate Students Scholarship College of Sciences /National University of Colombia

2005 Best admission score in College of Sciences Master Programs (4.96/5)

2004 Top ten students graduates in Computer Engineering in Colombia ECAES/ Ministry of Education

1999, 2001, 2002, 2003, Honorary Enrollment, College of Engineering/ National University of Colombia

RECENT PUBLICATIONS:

Controlling wild mobile robots using virtual gates and discrete transitions. L. Bobadilla, F. Martinez, E. Gobst, K. Gossman, and S. M. LaValle. In *American Control Conference*, 2012. Invited [\[pdf\]](#).

Minimalist multiple target tracking using directional sensor beams. L. Bobadilla, O. Sanchez, J. Czarnowski, and S. M. LaValle. In *Proceedings IEEE International Conference on Intelligent Robots and Systems*, 2011. [\[pdf\]](#).

Controlling wild bodies using linear temporal logic. L. Bobadilla, O. Sanchez, J. Czarnowski, K. Gossman, and S. M. LaValle. In *Proceedings Robotics: Science and Systems*, 2011. [\[pdf\]](#).

Manipulating ergodic bodies through gentle guidance. L. Bobadilla, K. Gossman, and S. M. LaValle. In *Proceedings IEEE Conference on Robot Motion and Control*, 2011. [\[pdf\]](#).

Toward a Compositional Theory of Sensor-Based Robotic Systems (Extended Abstract) L. Bobadilla, O. Sanchez, S. M. LaValle. *RSS 2010 Workshop Motion Planning: From Theory to Practice*

POSTERS:

L. Bobadilla, K. Gossman, and S. M. LaValle. Making Ergodic Bodies Work For Us. Poster Session in The Ninth International Workshop on the Algorithmic Foundations of Robotics (WAFR 2010)

OLDER PUBLICATIONS

Publications on Computational Biology

Gene Selection Based On Category Detection Of Gene Ontology. O. Sanchez, C. Payan, L. Bobadilla, F. Gonzalez, E. Barreto. In *Proceedings of the seventh international conference for the Critical Assessment of Microarray Data Analysis, CAMDA 2007*.

Characterizing and Predicting Catalytic Residues in Enzyme Active Sites Based on Local Properties: A Machine Learning Approach. L. Bobadilla, F. Nino, E. Cepeda and M. A. Patarroyo. In *IEEE 7th International Symposium on BioInformatics & BioEngineering 2007*.

A Novel Methodology for Characterizing and Predicting Protein Functional Sites. L. Bobadilla, F. Nino, E. Cepeda and M. A. Patarroyo. In *2007 IEEE International Conference on Bioinformatics and Biomedicine 2007*.

A Genetic Word Clustering G. Hernandez, L. Bobadilla; O. Sanchez. In *Proceedings of the IEEE Congress on Evolutionary Computation (CEC) 2005*.

L. Bobadilla, F. Nino, G. Narasimhan Predicting and characterizing metal-binding sites using Support Vector Machines. In *Proceedings of the International Conference on Bioinformatics and Applications 2004*.

Service

2011-2012 Graduate Student Representative in the CS Grad Council for the Artificial Intelligence Area.

2011 CS-Graduate Student Ambassador.

2010 Reviewer of applications for the CS graduate program at UIUC

Teaching experience

2005-II Incca University of Colombia

Program Verification

Programming Languages

2006-2007 National University of Colombia

Statistics I Statistics II

Research experience

2008-2012 Motion Strategy Lab, University of Illinois, USA
2003-I National University of Colombia
Internship Depart of Genetics
2004 National University of Colombia
Laboratory of Research on Intelligent Systems (LISI)