

Manuel Mazo Jr.

CONTACT INFORMATION	Cyber Physical Systems Lab University of California, Los Angeles Department of Electrical Engineering, School of Engineering & Applied Sciences Los Angeles, California United States of America	<i>Phone:</i> +1 (0) 310-254-5894 <i>E-mail:</i> mmazo@ee.ucla.edu
CITIZENSHIP	Spain	
LANGUAGES	Spanish (Native), English (Fluent), Swedish (Fluent), Italian (Advanced), Dutch (Intermediate), German (Beginner).	
RESEARCH INTERESTS	Distributed control; hybrid systems; symbolic models for control; communications, code and controller co-design; sensor-networks.	
EDUCATION	Polytechnical University of Madrid , Madrid, Spain B.Sc./M.Sc., (Ingeniero Diploma) (1998-2001) Telecommunications Engineering, August 2003 <ul style="list-style-type: none">• Thesis Topic (performed at KTH under Double Degree Agreement, see below): Robust Area Coverage Robotics.• Advisor: Prof. Karl H. Johansson• Communications specialization. Royal Institute of Technology , Stockholm, Sweden M.Sc., (Civil Ingenjör) (2001-2003) Electrical Engineering, August 2003 <ul style="list-style-type: none">• Thesis Topic: Robust Area Coverage Robotics.• Advisor: Prof. Karl H. Johansson• Area of Study: Control Systems• Control Systems and Robotics specialization University of California, Los Angeles , Los Angeles, USA M.Sc., (2005-2007) Electrical Engineering, March 2007 <ul style="list-style-type: none">• Area of Study: Control Systems PhD, (2007-ongoing) Electrical Engineering, March 2007 <ul style="list-style-type: none">• Advisor: Prof. Paulo Tabuada• Area of Study: Distributed Event-Triggered Control Systems	
PROFESSIONAL MEMBERSHIPS	IEEE (CSS), IFAC, SIAM.	
AWARDS	<ul style="list-style-type: none">• (2007/2008) Henry Samueli Scholarship Winner from the Henry Samueli School of Engineering and Applied Sciences, UCLA.• (2005-2009) MECD/UCLA Fellowship for postgraduate studies.• (2005) University of Newcastle Research Scholarship, External funding from the CDSC (Centre of Excellence, Complex Dynamical Systems and Control).	

- (2002/2003) Stipend given by The Swedish-Spanish Foundation for the Promotion of Education and Studies.
- (2002/2003) Scholarship for abroad studies granted by UPM (Technical University of Madrid).
- (2001/2002) Socrates-Erasmus grant promoted by the European Commission for exchange studies at KTH.
- (1997) Pre-University course special award for outstanding proficiency (Matricula de Honor COU).
- (1996) High school special award for outstanding proficiency (Premio Extraordinario de Bachillerato).
- (1993) Winner of the MEC Mathematics Olympiad (regional contest).

MASTERS THESIS “Robust Area Covering using Hybrid Control”, March 2003. KTH, Sweden

JOURNAL
PUBLICATIONS

- “Self-Triggered Control: trading actuation for computation”, M. Mazo Jr, A. Anta and P. Tabuada. 2009, Under Revision.
- “Superstability and finite time extinction for C_0 -Semigroups”, D. Creutz, M. Mazo Jr and C.Preda. 2008, Under Revision.
- “Path-Planning for Robust Area Coverage: Evaluation of Five Coordination Strategies”, M. Mazo Jr and K. H. Johansson. 2006, Under Revision.

CONFERENCE
PUBLICATIONS

- “Input-to-state stability of self-triggered control systems”, M. Mazo Jr. and P. Tabuada. Proceedings of the 48th Conference on Decision and Control, 2009. (To appear)
- “On Self-Triggered Control for Linear Systems: Guarantees and Complexity”, M. Mazo Jr., A. Anta and P. Tabuada. European Control Conference 2009.
- “On event-triggered and self-triggered control over sensor/actuator networks”, M. Mazo Jr. and P. Tabuada. Proceedings of the 47th Conference on Decision and Control, 2008.
- “Reduction of lateral and longitudinal oscillations of vehicles platooning by means of decentralized overlapping control”, F. Espinosa, A.M.H. Awawdeh, M. Mazo Jr, J.M. Rodriguez, A. Bocos, M. Manzano. Proceedings of the 46th Conference on Decision and Control, 2007.
- “Multi-Robot Tracking of a Moving Object Using Directional Sensors”, M. Mazo Jr, A. Speranzon, K. H. Johansson, X. Hu. Proceedings of the International Conference on Robotics and Automation 2004.
- “Robust area coverage using hybrid control”, M. Mazo Jr, K. H. Johansson. TELECOM 2004.
- “Integrated Development Environment for Underactuated Non-Linear Control Systems”, F. Espinosa, F. J. Castillo, M. Mazo Jr. SAAEI/EPF 2004.

PROFESSIONAL
EXPERIENCE

- **The University of Newcastle, Australia** (2005)
School of Engineering and Computer Science (CDSC)
Teaching assistant: Digital Signal Processing, Electrical Machines;
Assistant researcher: “Hybrid systems identification”.
- **Universidad Politécnica de Madrid, Spain** (2004-2005)
Escuela Técnica Superior de Ingenieros Industriales (DISAM)
Assistant researcher: “Motion Simulator under project PLATEL”.
- **Royal Institute of Technology, Sweden** (2002-2004)
Electrical Engineering Department (Control Section) and
Math (Opt-Sys Section) Department
Teaching assistant: Basic Control Systems Course (Lab Section);
Assistant researcher: “Cooperative robotics”.
- **CERN, Switzerland** (2001)
Summer student project: SCADA system for distributed data processing.
- **Logytel, Spain** (1998, 2000, 2004)
Summer intern: SCADA (IsaGraf), control networks (Lonworks/Echelon) and
PLC (IEC1131) developer.