Curriculum vitae

Personal Information

Last name, first name:	Mazo Espinosa (aka Mazo Jr.), Manuel
Date of birth:	03-05-1979
Nationality:	Spain
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Education

2014	University Teaching Qualification (UTQ/BKO)
	Delft University of Technology, Delft, The Netherlands
2010	PhD in Electrical Engineering
	University of California, Los Angeles (UCLA), Los Angeles, USA
2007	MSc in Electrical Engineering (Minor in Applied Mathematics)
	University of California, Los Angeles (UCLA), Los Angeles, USA
2003	MSc (Civilingenjör) in Electrical Engineering
	Royal Institute of Technology (KTH), Stockholm, Sweden
2003	MSc (Ingeniero) in Telecommunications Engineering
	Polytechnic University of Madrid (UPM), Madrid, Spain

Current position

2018-today	Associate Professor ("Universitair Hoofddocent")
	Delft Center for Systems and Control, TU Delft, Delft, The Netherlands

Previous positions

2012-2018	Assistant Professor ("Universitair Docent") on Tenure Track
	Delft Center for Systems and Control, TU Delft, Delft, The Netherlands
2014	Guest Professor
	Hybrid Control Systems group, TU München, Munich, Germany
2010-2012	Post-doctoral researcher
	INCAS[3], Assen, The Netherlands
2010-2012	Post-doctoral researcher
	Department of Discrete Technology and Production Automation,
	University of Groningen, The Netherlands
2010-2013	Visiting lecturer
	Department of Electronics, University of Alcalá, Spain
2005-2010	Research Assistant
	(Cyber-Physical Systems Lab), University of California, Los Angeles, USA.
2005	Research and Teaching assistant
	Complex Dynamic Systems and Control Research Centre,
	The University of Newcastle, Australia
2004-2005	Research assistant
	Robotics and Cybernetics Group, Polytechnic University of Madrid, Spain
2002-2004	Research and Teaching assistant
	Electrical Engineering and Mathematics Departments,
	Royal Institute of Technology, Stockholm, Sweden
2001	Summer intern
	CERN, Geneva, Switzerland
1998, 2000	Summer intern
	Logytel S.L., Alcalá de Henares, Spain

Membership of Scientific Societies

1997-today	IEEE (Senior Member). IEEE Control Systems Society, TC Hybrid Systems (Software Tools co-chair)
	(intermittently member IEEE Robotics and Automation Society and IEEE Industrial Electronics Society)
2010-today	Association for Computing Machinery (ACM)
2003-today	International Federation of Automatic Control (IFAC) (TC 1.3 Discrete Event and Hybrid Systems, TC 1.5 Networked Systems)
2003-today	Society for Industrial and Applied Mathematics (SIAM)

Fellowships and Awards

2017	ERC Starting Grant # 755953 Project SENTIENT
2014	Guest Professorship Grant Bayerisches Staatsministerium für Bildung und Kultus, Wissenschaft und Kunst.
2009	General Chair's Recognition Award for Interactive Papers,
	48th Conference on Decision and Control joint with Chinese Control Conference
2007, 2008	Henry Samueli Scholarship from the Henry Samueli School of Engineering and Applied Sciences, UCLA.
2005-2009	Spanish Ministry of Science/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 from The Swedish-Spanish Foundation for the Promotion of Education and Studies.
2002-2003	Scholarship for abroad studies granted by UPM.
2001-2002	Socrates-Erasmus grant promoted by the European Commission for exchange studies at KTH.

Grants

Main applicant:

- SENTIENT (**ERC Starting**), PI. 1.5M€.

- CADUSY (STW-OTP), Co-PI and coordinator. 668 k€ (500k€ subsidized) 2015-2019. Share: 1 PhD, 1 PostDoc (1 year), travel costs and equipment.

- STW Take-off grant, co-applicant with SeaState5. 40k€. Equipment.

- Gastprofessorenprogramm des Bayerisches Staatsministerium für Bildung und Kultus, Wissenschaft und Kunst. 1400 € to support a visit as Guest Professor at TU Munich, 2014.

Participant:

- IAVTRM (STW-OTP), 1.2 M€ (750k€ subsidized) 2015-2019. Share: 1 PostDoc (3 years)

- S4-DRIVE (STW-OTP), 651 k€ (520k€ subsidized) 2015-2019. Share: 1 Technical staff (2 year)

- AMBI (Marie-Curie FP7-PEOPLE-2012-IAPP), 2013-2017. Share: Costs for 2 months stay at Honeywell, Prague.

Education Activities and Supervision

2021-today	Rudi Coppola. PhD Student at TU Delft
2019-today	Daniel Jarne-Ornia. PhD Student at TU Delft
2018-2022	Giannis Delimpaltadakis. PhD Student at TU Delft

2018-2022	Gabriel A. Gleizer. PhD Student at TU Delft
2017	Vinicius Falchetto. Visiting PhD Student from UNICAMP (Brazil)
2015-2020	Cees Verdier. PhD Student at TU Delft
2013-2018	Anqi Fu. PhD Student at TU Delft
2013-2015	Eric Trottemant. PhD Student at TU Delft.
2013-2014	Carlos Santos. Visiting PhD Student from University of Alcalá.

2021-today	Andrea Peruffo. Post-doctoral researcher at TU Delft
2020-today	Alexey Ilyushkin. Post-doctoral researcher at TU Delft
2020-today	Khushraj Madnani. Post-doctoral researcher at TU Delft
2020-2021	Gururaj Maddodi. Post-doctoral researcher at TU Delft
2017-2018	Ivan Zapreev. Post-doctoral researcher at TU Delft
2016-2018	Anton V. Prokurshnikov. Post-doctoral researcher at TU Delft
2015	Erkan Kayakan. Post-doctoral researcher at TU Delft
2014-2015	Dieky Adzkiya. Post-doctoral researcher at TU Delft

2012-today	Over 50 MSc thesis supervised at TU Delft, University of Groningen (2) and Wageningen University (1). Six of these MSc thesis were awarded the *Cum Laude* distinction.

2020	PhD graduation committee of Dominik Baumann (KTH, Sweden)
2020	PhD graduation/examination committee of M. Balaghiinaloo (TU Eindhoven)
2020	PhD graduation committee of Dhruv Khandewal (TU Eindhoven)
2019	PhD graduation/examination committee of Stefan Heijmans (TU Eindhoven)
2019	Licenciate thesis examiner of Dominik Baumann (KTH, Sweden)
2018	PhD graduation committee Danial Senejohnny (U. Groningen)
2018	PhD graduation committee Muhammad Zakiyullah Romdlony (U. Groningen)
2017	PhD graduation committee Mohammad Al Khatib (CentraleSupelec, France)
2016	PhD graduation committee of Héctor J. García de Marina Peinado (U. Groningen)
2011	PhD graduation committee of Florian Kerber (U. Groningen)

2020-today	Instructor for SC42100 Networked and Distributed Control Systems, TU Delft
2020-today	Responsible instructor for SC42155 Modelling of Dynamical Systems (MSc course)
2019-2020	Responsible instructor for SC42010 Robust and Multivariable Control (MSc course)
2012-2019	Responsible instructor for WB2231 (formerly WBTP211-10) Mechatronica Project (BSc Mechanical Engineering), TU Delft
2016	Co-organizer DISC Summer School: "A Systems and Control Perspective in Human-Robot-Environment Interaction"
2015-2017	Responsible instructor for SC4070 Control Systems Lab, (MSc course) TU Delft
2015-2017	Instructor for ME1190 Integration Project Vehicle Engineering
2015,2017	Instructor DISC school: Automatic Verification and Synthesis of Complex Systems
2014	MTNS Mini-Course (organizer and lecturer) on "Automated verification and synthesis of complex systems"
2014	TU Delft/Leiden iGEM Team modeling advisor.
2014	Invited lecturer Modelling and Verification of Embedded Systems, TU München.
2011,2012	Invited lecturer NABP05E Robotics, University of Groningen
2010,2011	Invited lecturer MSc. Advanced Electronic and Intelligent Systems, University of Alcalá
2010	CDC Pre-Conference Workshop Lecturer on "Correct-by-design embedded control software synthesis"

2005	Teaching Assistant. ELEC3400 Digital Signal Processing, ELEC2120 Electrical Machines. University of Newcastle (Australia)
2002-2003	Teaching Assistant. ELEC 100/1110/1120 Automatic Control. Royal Institute of Technology (Sweden)

Research Visits and Invited Talks

2022	Seminar: "Following the mysterious trails of time" CRAN-CNRS, Nancy, France
2021	Keynote speaker: "TA to bridge efficiency and predictability of ETC." 7th Int. Conf. EBBCSP, Krakow, Poland
2021	Keynote: "Analysis and design of stigmergy based robotic systems." DISC Summer School, Utrecht, The Netherlands
2021	Seminar: "Interdisciplinary approaches to scheduling." University of Trento, Italy
2020	Université Catholiqué de Louvain. "The quest to schedule event-based controllers. An approach via formal abstractions."
2019	Invited speaker 13th International ICMAT Summer School on Geometry, Mechanics and Control
2017	Invited Lecturer. DISC Summer School "A Systems and Control Perspective on Privacy, Safety and Security in large-scale Cyber-Physical Systems".
2017	Semi-plenary lecture International Conference on Mathematics: Pure Applied and Computation 2017, Surabaya, Indonesia
2016	UCLA: United States of America. CyPhyLab, invited by Prof. P. Tabuada. (1 week Winter quarter)
2016	Invited Speaker. ANR Workshop "Control subject to computational and communication constraints" (CO4), CNRS Toulouse
2016	University of Trento, Italy: Visiting researcher at Department of Information Engineering and Computer Science, invited by Prof. G.P. Picco. (1 week Summer)
2016	Imperial College London, UK: Visiting researcher at Adaptive Emergent Systems Engineering group (Department of Computing), invited by Prof. J. McCann. (1 week Summer)
2014	TU München, Germany: Guest professor at the Hybrid Control Systems Group, hosted by Prof. M. Zamani. (2 weeks Fall quarter)
2012	UCLA: United States of America: Visiting researcher at the CyPhyLab, invited by Prof. P.Tabuada. (1 month Spring quarter)
2011	TU/Berlin, Germany: Visiting researcher at the Control Systems Department, invited by Prof. J. Raisch. (1 week in Summer)
2010	KTH, Sweden: Visiting researcher at the ACCESS center, invited by Prof. K. H. Johansson. (1 week in Spring quarter)
2010-2012	University of Alcala, Spain: Visiting researcher/lecturer at the Department of Electronics, invited by Prof. Espinosa. (1 week each Winter quarter)
2009	MIT: Visiting student at the Laboratory for Information and Decision Systems, under the auspices of Prof. Emilio Frazzoli. (Fall quarter)

Academic and Institutional Service

2019-today	Board of Studies MSc. Computer Engineering and Embedded Systems, TU Delft: Lecturer member.
2016-2019	Board of Studies BSc. Mechanical Engineering, TU Delft: Lecturer member.
2008	UCLA Electrical Engineering graduate admissions committee: Signals and Systems.
2021	European Control Conference (ECC'21) Publicity Chair.
2021	Associate Editor, Nonlinear Analysis: Hybrid Systems (Elsevier)

2019-today	TU Delft, Education Committee MSc. Computer Engineering and Embedded Systems.
2020-today	Project Evaluator for the European Research Council
2018	Project Evaluator for the Polish National Science Centre
2018	Project Evaluator for ANR - French Research Agency
2017	Jury member. NWO-TTW Open Technology Program.
2016	Project Evaluator for the Israeli Science Foundation
2016	External MSc examiner for University of Pretoria (South Africa)
2020	Publicity Chair and Conference Editorial Board Member - European Control Conference.
2019-2020	Program Committee International Workshop on Numerical Software Verification.
2019	Program Committee 15th IFAC Symposium on Large Scale Systems
2018	Program Committee (theory track) 9th ACM/IEEE International Conference on Cyber-Physical Systems.
2018	Program Committee 6th IFAC Conference on Analysis and Design of Hybrid Systems.
2016-today	Program Committee HSCC - Hybrid Systems: Computation and Control
2016	Co-organizer of the DISC Summer School on "A Systems and Control Perspective in Human-Robot-Environment Interaction"
2015	Program Commitee and Work-in-progress co-chair EBCCSP 2015 - First IEEE International Conference on Event-based Control, Communication, and Signal Processing
2013	Co-organizer of 2 invited sessions on "Formal methods in control" at CDC.
2012	Organizer of an invited session on "Event-triggered and self-triggered control" at ADHS .
2011	Co-organizer of 3 invited sessions on "Symbolic methods for control" at CDC/ECC.