

JOÃO P. HESPANHA

EDUCATION

- Ph.D.**, Electrical Engineering, YALE UNIV., New Haven, CT 1998
Ph.D. Adviser: Prof. A. Stephen Morse
Dissertation Title: *Logic-Based Switching Algorithms in Control*
- Licenciatura**, Electrical and Computer Engineering, 1991
INSTITUTO SUPERIOR TÉCNICO, Lisbon, Portugal

TEACHING EXPERIENCE

- Distinguished Professor** 2020-
UNIV. OF CALIFORNIA, Dept. of Electrical and Computer Engineering, Santa Barbara, USA.
- Professor** 2006–2020
UNIV. OF CALIFORNIA, Dept. of Electrical and Computer Engineering, Santa Barbara, USA.
- Associate Professor** 2002–2006
UNIV. OF CALIFORNIA, Dept. of Electrical and Computer Engineering, Santa Barbara, USA
- Assistant Professor** 1999–2001
UNIV. OF SOUTHERN CALIFORNIA, Dept. of Electrical Engineering, Los Angeles, USA

SELECTED UNIVERSITY POSITIONS

- Department Chair** 2013–2017
DEPT. OF ELECTRICAL AND COMPUTER ENGINEERING, Univ. of California, Santa Barbara, USA
- Director** 2011–2013
CENTER FOR CONTROL, DYNAMICAL-SYSTEMS, AND COMPUTATION (CCDC), Univ. of California, Santa Barbara, USA

AWARDS AND RECOGNITIONS

51,445 citations in Google Scholar and 21,729 citations in the ISI Web of Science, as of November 2023.

2021 *Plenary Speaker* at the 26th International Conference on Methods and Models in Automation and Robotics (MMAR2021), Międzyzdroje, Poland, Aug. 2021.

2019 *ACM SIGBED Hybrid Systems Computation and Control (HSCC) Best Paper Award* for the paper “On topological entropy and stability of switched linear systems.”

2016 *Int. Federation of Automatic Control Fellow Award* with citation “For contributions to the stability theory of switched and hybrid systems and its application to the analysis and design of networked control systems.”

2016 *Int. Conference on Cyber Physical Systems (ICCPS) Best Paper Award* for the paper “SMT-based observer design for cyber-physical systems under sensor attacks”

2016 *Power & Energy Society 2012 General Meeting selection for presentation at a Best Conference Paper session* for the paper “Distributed Monitoring of Wide-Area Oscillations in the Presence of GPS Spoofing Attacks”

2014 *Keynote Speaker* at the 2014 IEEE Int. Conf. on Control and Automation (IEEE ICCA), Taichung, Taiwan.

2014 *Plenary Speaker* at the 1st Multi-symposium on Control Systems (MSCS2014), Tokyo, Japan.

2013 *Plenary Speaker* at the 4th IFAC Workshop on Distributed Estimation and Control in Networked Systems (NECSYS'13).

2012 *Keynote Speaker* at the 3rd International Workshop on Wireless Networking and Control for Unmanned Autonomous Vehicles (WiAUV'12).

2011 *Plenary Speaker* at the XIV Workshop on Information Processing and Control (RPIC2011), Oro Verde, Argentina.

2010 *Semi-plenary Speaker* at the 49th IEEE Conference on Decision and Control (CDC'2010).

2010 *Keynote Speaker* at the 52th Turkish National Symposium on Automatic Control (TOK'2010).

2009 *IEEE Ruberti Young Researcher Prize* with citation "For fundamental contributions to adaptive control and to the theory of switched and hybrid systems."

2008 *IEEE Fellow* with citation "for contributions to stability techniques for switched and hybrid systems."

2007-2013 *IEEE Distinguished Lecturer*.

2006 *George S. Axelby Outstanding Paper Award* for the paper "Uniform stability of switched linear systems: extensions of LaSalle's Invariance Principle." *IEEE Trans. on Automat. Contr.*, 49(4):470–482, Apr. 2004.

2005 *Best Paper Award at the 2nd Int. Conf. on Intelligent Sensing and Inf. Proc.* for the paper "Estimation from relative measurements: Error bounds from electrical analogy," with (P. Barooah), Jan. 2005.

2002-2004 *Automatica Theory/Methodology Best Paper Prize* for the paper "J. P. Hespanha and A. S. Morse. Switching between stabilizing controllers. *Automatica*, 38(11), Nov. 2002."

2002 *Plenary Speaker* at the 5th Portuguese Conference on Automatic Control (Controlo 2002), Univ. of Aveiro, September 5, 2002.

2001 *National Science Foundation (NSF) Faculty Early Career Development (CAREER) award*.

1999 *Yale University's Henry Prentiss Becton Graduate Prize* for exceptional achievement in research in Engineering and Applied Science for the PhD thesis *Logic-Based Switching Algorithms in Control*. PhD Thesis, Yale Univ., New Haven, CT, 1998.

ORGANIZATION OF WORKSHOPS AND CONFERENCES

Co-chair of the 3rd IFAC Workshop on Distributed Estimation and Control in Networked Systems (NECSYS'12), Sep. 2012 (with F. Bullo).

Chair of the Ninth Int. Workshop on Hybrid Systems: Computation and Control (HSCC'06), Mar 2006.

Co-organizer of the biannual "Southern California Nonlinear Control Workshop Series," San Diego/Los Angeles/Santa Barbara, June 2001–present (with M. Krstic, R. Murray, C. Panagiotis, and A. Teel).

Organizer and program chair of the Conference "Touch in Virtual Environments," Los Angeles, California, Feb. 2001 (with M. McLaughlin and G. Sukhatme).

OTHER PROFESSIONAL ACTIVITIES

Senior Editor of Nonlinear Analysis: Hybrid Systems, a journal of the International Federation of Automatic Control (IFAC), published by Elsevier, 2022–.

IEEE Control Systems Society Vice-President for Financial Activities, 2021–2022.

IEEE Control Systems Society Vice-President for Technical Activities, 2019–2020.

Elected member of the IEEE Control Systems Society (CSS) Board of Governors (BoG), 2009–2011 and 2018–2020.

Chair of the IEEE Control Systems Society Awards Committee, 2016–2018.

Associate editor of the IEEE Transactions on Automatic Control, 2004–2007.

PUBLICATIONS

Author of over 450 papers published in peer-reviewed conferences and journals. A full list of publications is available online at <http://www.ece.ucsb.edu/~hespanha/published.html>

INVITED LECTURES

AeroVironment, CA; Boston Univ., MA; California Institute of Technology, Pasadena; Carnegie Mellon University, Pittsburgh, PA; Concordia Univ., Montreal, Canada; Georgia Tech, Atlanta; Grenoble Univ., France; Harvard Univ., Boston; Honeywell Technology Center, Minneapolis, MN; Institute for Mathematics and its Application, Minneapolis, MN; Instituto Superior Técnico, Lisbon, Portugal; KTH, Stockholm, Sweden; Kyoto Univ., Japan; Lawrence Berkeley National Laboratory, Berkeley, CA; Lund Univ., Sweden; Massachusetts Institute of Technology, Boston; Missouri University of Science and Technology; Naval Postgraduate School, Monterey, CA; The Ohio State University, Columbus; Rensselaer Polytechnic Institute, Troy, NY; Rutgers Univ., NJ; Space and Naval Warfare Systems Center, San Diego, CA; Stanford Univ., Palo Alto, CA; Stockholm Institute of Technology, Sweden; Texas A & M University, College Station; Tokyo Institute of Technology, Japan; US Air Force Research Laboratory, Kirtland Air Force Base, Albuquerque, NM; US Air Force Research Laboratory, Wright-Patterson Air Force base, Dayton, OH; US Army Research Laboratory, Adelphi, Maryland; United States Academy, West point, NY; United Technologies Research Center (UTRC), Hartford, CT; Univ. of British Columbia, Vancouver, Canada; Univ. of California, Berkeley; Univ. of California, Los Angeles; Univ. of California, Riverside; Univ. of California, San Diego; Univ. of Illinois, Urbana-Champaign, IL; Univ. of Maryland, College Park; Univ. of Michigan, Ann Arbor; Univ. of Minnesota, MN; Univ. of Notre Dame, South Bend, IN; Univ. of Pennsylvania, Philadelphia; Univ. of Southern California, Los Angeles; Univ. of Stuttgart, Germany; Univ. of Texas, Dallas; Univ. of Texas, San Antonio; Univ. of Washington, Seattle; Yale Univ., New Haven, CT.

SPONSORED RESEARCH

Principal or co-principal investigator is research projects funded by the Air Force Office of Scientific Research, Army Research Office, Army Research Office, DARPA/ISO, DARPA/IXO, National Science Foundation, Office of Naval Research, SPAWAR Systems Center.