

Dr. Luis Rodolfo Garcia Carrillo

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Science & Engineering, Engineering & Computing Sciences
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Education

Postdoctoral Fellow, University of California - Santa Barbara, 2013.

PhD, University of Technology of Compiègne, 2011.

MS, Institute of Technology of La Laguna, 2007.

BS, Institute of Technology of La Laguna, 2003.

Professional Employment

Researcher, Institute for Collaborative Biotechnologies (ICB). (February 2012 - July 2013).
Research Scientist

Postdoctoral Researcher, University of California Santa Barbara. (February 2012 - July 2013).
Postdoctoral Researcher

TEACHING

Teaching Experience

COSC 1330, PROG SCIENTISTS, ENGINEERS & MATH
ENTC 4446, CONTROL SYSTEMS I
ENTC 4448, CONTROL SYSTEMS II
ENTC 4496, DIS: Research for Dr. Garcia's Remotely Operated Aircraft (ROA), Unmanned Systems Laboratory

SCHOLARLY AND CREATIVE ACTIVITIES

Publications

Refereed

Books

Garcia Carrillo, L. R. (2013). *Quad Rotorcraft Control: Vision- Based Hovering and Navigation* (1st ed., vol. 1, pp. 179). Berlin: Springer London.
www.springer.com/engineering/control/book/978-1-4471-4398-7

Conference Proceedings

Torno, C., Hintz, C., Garcia Carrillo, L. R. (2014). *Design and Development of a Semi-autonomous Fixed-Wing Aircraft with Real-time Video* (pp. 1021 - 1028). Orlando, Florida: International Conference on Unmanned Aircraft Systems.
http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6842353&punumber%3D6835384%26sortType%3Dasc_p_Sequence%26filter%3DAND%28p_IS_Number%3A6842225%29%26pageNumber%3D6

Hintz, C., Torno, C., Garcia Carrillo, L. R. (2014). *Design and Dynamic Modeling of a Rotary Wing Aircraft with Morphing Capabilities* (pp. 492 - 498). International Conference on Unmanned Aircraft Systems.

http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6842290&punumber%3D6835384%26sortType%3Dasc_p_Sequence%26filter%3DAND%28p_IS_Number%3A6842225%29%26pageNumber%3D3

Isaacs, J. T., Quitin, F., Garcia Carrillo, L. R., Madhow, U., Hespanha, J. (2014). *Quadrotor Control for RF Source Localization and Tracking". The 2014 International Conference on Unmanned Aircraft Systems* (pp. 244 - 252). International Conference on Unmanned Aircraft Systems.

Vamvoudakis, K., Garcia Carrillo, L. R., Hespanha, J. (2013). *Learning Consensus in Adversarial Environments* (vol. 8741). Baltimore, Maryland: Proc. SPIE 8741, Unmanned Systems Technology XV.

<http://spie.org/Publications/Proceedings/Paper/10.1117/12.2014372>

Ramirez, A., Espinoza, E., Garcia Carrillo, L. R., Mondie, S., Lozano, R. (2013). In IEEE (Ed.), *Stability analysis of a vision-based UAV controller for autonomous road following missions* (pp. 1135 - 1143). Atlanta, Georgia: International Conference on Unmanned Aircraft Systems. http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6564804

Journal Articles

Garcia Carrillo, L. R., Fantoni, I., Rondon, E., Dzul, A. (2015). 3-dimensional Position and Velocity Regulation of a Quad-rotor Using Optical Flow. *IEEE Transactions on Aerospace and Electronic Systems*, 51(1), 358-371.

<http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7073497>

Garcia Carrillo, L. R., Flores, G., sanahuja, G., Lozano, R. (2014). Quad Rotorcraft Switching Control: An Application for the Task of Path Following. *IEEE Transactions on Control Systems Technology*, 22(4), 1255 - 1267.

ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6644253

Garcia Carrillo, L. R., Russell, W. J., Hespanha, J. P., Collins, G. E. (2014). State Estimation of Multi-Agent Systems under Impulsive Noise and Disturbances. *IEEE Transactions on Control Systems Technology*. ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=6777346

Ramirez, A., Espinoza, E., Garcia Carrillo, L. R., Mondie, S., Garcia, A., Lozano, R. (2013). Stability Analysis of a Vision-Based UAV Controller: An Application to Autonomous Road Following Missions. *Journal of Intelligent and Robotic Systems*, 74, 69–84.

download.springer.com/static/pdf/620/art%253A10.1007%252Fs10846-013-9946-z.pdf?auth66=1411577805_5c8b7609143e47246a64f52f6605e2bd&ext=.pdf

Presentations

Garcia Carrillo, L. R., "Unmanned Aircraft Systems: From Specialized Agents to Intelligent Networked Societies," Cyber-Physical Systems Seminar, University of New Mexico, Albuquerque, New Mexico. (November 25, 2014).

Garcia Carrillo, L. R., "Unmanned Aircraft Systems: From Specialized Agents to Intelligent Networked Societies," IEEE Galveston Bay Section, IEEE Galveston Bay Section, NASA/Johnson Space Center, 2101 Nasa Pkwy, Houston, TX 77058. (November 21, 2014).

Contracts, Grants and Sponsored Research

Sponsored Research

Garcia Carrillo, Luis Rodolfo (Principal), "Sense and Avoid Strategies for Heterogeneous Multi-agent Systems," Sponsored by TRDF Program Development Funding, Texas A&M University-Corpus Christi, \$20,000.00. (September 1, 2014 - August 31, 2015).

Scholarly and Creative Awards and Honors

National System of Researchers SNI - Level I, CONA CYT - Mexico. (2014).

SERVICE

Department

Committee Member, Faculty Search Committee 2014. (January 2014 - June 2014).

University

Student Org Advisor (Non-Professional Org), Society of Hispanic Professional Engineers. (November 2013 - Present).

Guest Speaker, FIRST Tech Challenge Event. (December 2013).

Professional

Editor, Journal Editor, Advances in Image and Video Processing (AIVP). (January 2014 - Present).

Reviewer, Journal Article, Automatica. (January 2014 - Present).

Reviewer, Journal Article, IEEE Transactions on Robotics. (January 2014 - Present).

Editor, Journal Editor, Transactions on Machine Learning and Artificial Intelligence (TMLAI). (January 2014 - Present).

Editor, Journal Editor, Journal of Control Science and Engineering. (September 2013 - Present).

Conference-Related, The 2014 International Conference on Unmanned Aircraft Systems. (May 2014 - June 2014).

Conference-Related, The 2014 IEEE GreenTech Conference. (April 2014 - May 2014).