Dr. Annalisa Scacchioli's Biographical Sketch (annalisa@gatech.edu, 510-292-0817)

Institutional Affiliation

Daniel Guggenheim School of Aerospace Engineering, Georgia Institute of Technology.

Field of Specialization and Research Interests

Application of feedback, control and diagnosis and multidisciplinary mathematical modeling of complex-engineered systems, with focus on **automotive and transportation systems** (transportation electrification, including energy storage systems, advanced vehicle propulsion systems, vehicle active safety systems).

Educational Background

Postdoctorate	Aerospace Engineering	Georgia Institute of Technology, 2008-
Postdoctorate	Civil and Environmental Engineering	University of California at Berkeley, 2007-2008
Postdoctorate	Mechanical Engineering	The Ohio State University, 2005-2006
PhD	Electrical Eng. and Computer Sciences	University of L'Aquila, Italy, 2005
MEng	Electrical Engineering	University of L'Aquila, Italy, 2000

Professional Background

2009-	Research Collaborator, Massachusetts Institute of Technology, Cambridge, USA
2008-	Research Collaborator, US Army CRRL, Hanover, New Hampshire, USA
2008	Visiting Researcher, Ford Research and Innovation Center, Dearborn, Michigan, USA
2008-	Research Collaborator, Ford Research and Innovation Center, Dearborn, Michigan, USA
2008-	Postdoctoral Researcher, Aerospace Engineering, Georgia Institute of Technology, USA
2007-2008	Postdoctoral Researcher, Earthquake Eng. R. C., University of California at Berkeley, USA
2005-2006	Research Collaborator, General Motors Corporation, Warren, Michigan, USA
2005-2006	Postdoctoral Researcher, Center for Automotive Research, The Ohio State University, USA
2002	Visiting Control Research Engineer, Daimler-Chrysler, Stuttgart, Germany
2000-2004	Control Research Engineer, Magneti-Marelli Powertrain, Bologna, Italy
2000	Visiting Undergraduate Student Researcher, PARADES, Rome, Italy

Awards and Grants (selected)

US NSF-GOALI Award (with P. Tsiotras and J. Lu) in collaboration with Ford Motor Company for "Next generation active safety control systems for crash-avoidance of passenger vehicles using expert driver knowledge," co-PI at the Georgia Institute of Technology, Atlanta, USA, 2008-present.

GM (General Motors) Grant (with G. Rizzoni) for "Faults diagnosis of electrical vehicles," co-PI at The Ohio State University Center for Automotive Research, USA, 2005-2006.

ASTRI Award for "Doctoral thesis for research in automotive industry," Milan, Italy, 2004.

ATA (Technical Association for Automobiles) Grant for "*Laurea* thesis on automotive control systems," Turin, Italy, 2000.

Publications (selected of 21)

1. **A. Scacchioli**, G. Rizzoni, M. A. Salman, W. Li, S. Onori, X. Zhang, "Experimental implementation of an on-board-oriented model-based diagnosis for an electric power generation and storage automotive system," in *ASME Journal of Dynamic Systems, Measurement, and Control* (in revision, 2010).
2. **A. Scacchioli**, P. Tsiotras, and J. Lu, "Nonlinear-feedback traction force control with load transfer," in *Proceedings of the 2nd ASME Dynamic Systems and Control Division Conference*, (Hollywood, California), October 12-14, 2009.
3. **A. Scacchioli**, A. M. Bayen, and B. Stojadinović, "Quality of hybrid simulation: a reachability analysis approach," in *Proceedings of the 18th ASCE Engineering Mechanics Division Conference,* (Blacksburg, Virginia), June 3-6, 2007.
4. **A. Scacchioli**, *Hybrid Regulation of Electromagnetic Valves in Automotive Systems.* EECS Ph.D. Dissertation, University of L'Aquila, *Biblioteca Nazionale di Roma* and *Biblioteca Nazionale di Firenze*, Italy, March 2005.