PERSONAL INFORMATION

Simone Paoletti

Via Roma, 56 – 53100 Siena (Italy)

+39 0577 235977

paoletti@dii.unisi.it; simone.paoletti@unisi.it

https://www3.diism.unisi.it/~paoletti/

Sex Male | *Date of birth* 03/08/1973| *Nationality* Italian

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
☐ Mid-Management Level	X **Associate Professor**	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

2021 – to date

Associate Professor of Control Systems

Department of Information Engineering and Mathematics, University of Siena, Siena, Italy

- Courses taught: "*Discrete Event Systems*" (in English); "*Dynamical Systems*" (in Italian)

2005 – 2021

Assistant Professor of Control Systems

Department of Information Engineering, University of Siena, Siena, Italy

- Courses taught: "*Discrete Event Systems*" (in English), "*Digital Control*" (in Italian)

2004 – 2007

Research Associate of Control Systems

Department of Information Engineering, University of Siena, Siena, Italy

- Teaching assistant for the courses "*Dynamical Systems*", "*Control Systems Design*", "*Modelling and Management of Environmental Systems*" (in Italian)
- Instructor for the course "*Statistics*" (in Italian)

EDUCATION AND TRAINING

2000 – 2004

PhD in Information Engineering

Department of Information Engineering, University of Siena, Siena, Italy

- Title of the thesis: "*Identification of piecewise affine models"*

1992 – 2000

Laurea Degree in Computer Engineering (cum laude)

School of Engineering, University of Roma "Tor Vergata", Roma, Italy

- Title of the thesis: "*A comparison of several approaches to robust stability analysis based on different representations of uncertainty*" (in Italian)

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s) English

Job-related skills Coordination and management of research units in projects with multiple partners

Digital skills Advanced user of several programming and computing tools (C, C++, Matlab, etc.)

ADDITIONAL INFORMATION

Research topics

- Modelling and identification of dynamical systems
- Robust control of uncertain systems
- Smart grids planning, operation and control
- Decision making in environmental applications

Participation in EU research projects

- FP5-EESD project "*DITTY - Development of an information technology tool for the management of Southern European lagoons*", 2003-06.
- FP6-IST project "*HYCON - Hybrid control: taming heterogeneity and complexity of networked embedded systems*", 2004-08.
- FP6-AEROSPACE project "*COFCLUO - Clearance of flight control laws using optimisation*", 2007-10.
- FP7-ENERGY project "*ADDRESS - Active distribution networks with full integration of demand and distributed energy resources*", 2008-13. Coordinator of Task 3.5 "New operational planning applications for the MV Control Center".

Recognitions of the research activity

- Recipient of the grant FFABR 2017 from the Italian Ministry for Education, University and Research (2017).

Technology transfer

- Contract with Siemens S.p.A. for the development, implementation, and support in field-testing of algorithms for renewable energy forecasting in medium- and low-voltage electrical networks (2011-14).

Bibliometric indicators (4/10/2025)

- Citations: 2035 (Scopus), 3121 (Google Scholar)
- H-index: 18 (Scopus), 22 (Google Scholar)

Selected publications

- G.G. Zanvettor, M. Casini, A. Giannitrapani, S. Paoletti, A. Vicino (2025). A chance-constrained programming approach to optimal management of car-rental fleets of electric vehicles. *Sustainable Energy, Grids and Networks*, 41:1-10.
- G. Bianchini, S. Paoletti, A. Vicino (2021). Linear fractional representations and L_2-stability analysis of continuous piecewise affine systems. *IEEE Control Systems Letters*, 5(1):229-234.
- B. Cornélusse, I. Savelli, S. Paoletti, A. Giannitrapani, A. Vicino (2019). A community microgrid architecture with an internal local market. *Applied Energy*, 242:547-560.
- M. Bucciarelli, S. Paoletti, A. Vicino (2018). Optimal sizing of energy storage systems under uncertain demand and generation. *Applied Energy*, 225:611-621.
- D. Zarrilli, A. Giannitrapani, S. Paoletti, A. Vicino (2018). Energy storage operation for voltage control in distribution networks: A receding horizon approach. *IEEE Transactions on Control Systems Technology*, 26(2):599-609.
- A. Giannitrapani, S. Paoletti, A. Vicino, D. Zarrilli (2017). Optimal allocation of energy storage systems for voltage control in LV distribution networks. *IEEE Transactions on Smart Grid*, 8(6): 2859-2870.
- M. Casini, C. Mocenni, S. Paoletti, M. Pranzo (2015). Decision support system development for integrated management of European coastal lagoons. *Environmental Modelling & Software*, 64: 47-57.
- A. Garulli, S. Paoletti, A. Vicino (2015). Models and techniques for electric load forecasting in the presence of demand response. *IEEE Transactions on Control Systems Technology*, 23(3):1087-1097.
- G. Bianchini, S. Paoletti, A. Vicino (2013). Convex relaxations for L_2-gain analysis of piecewise affine/polynomial systems. *International Journal of Control*, 86(7):1207-1213.
- E. Pepona, S. Paoletti, A. Garulli, P. Date (2011). Identification of piecewise affine LFR models of interconnected systems. *IEEE Transactions on Control Systems Technology*, 19(1):148-155.
- S. Paoletti, J. Roll, A. Garulli, A. Vicino (2010). On the input-output representation of piecewise affine state space models. *IEEE Transactions on Automatic Control*, 55(1):60-73.
- S. Paoletti, A. Lj. Juloski, G. Ferrari-Trecate, R. Vidal (2007). Identification of hybrid systems: A tutorial. *European Journal of Control*, 13(2-3):242-260.
- A. Bemporad, A. Garulli, S. Paoletti, A. Vicino (2005). A bounded-error approach to piecewise affine system identification. *IEEE Transactions on Automatic Control*, 50(10):1567-1580.

