

# Massimiliano d'Angelo

## PERSONAL INFORMATION

Name	Massimiliano d'Angelo
Nationality	Italian
Current location	Rome, Italy
Contact	[omitted – available upon request]

## PROFILE

Associate Professor (Automatica / Control Systems) with research experience in stochastic systems, estimation and control, networked and time-delay systems, and applications to systems/synthetic biology and biomedicine. Active in editorial and conference service within the control community.

## WORK EXPERIENCE

**May 2025 – present — Associate Professor (SSD ING-INF/04 Automatica), Università Mercatorum (Rome, Italy)**

- Teaching: Fondamenti di Automatica (9 CFU), BSc in Computer Engineering (L-8).

**Jun 2025 – present — Research Associate, IASI-CNR (Institute for System Analysis and Computer Science “A. Ruberti”, Rome, Italy)**

- Data-driven and model-based identification, estimation and control with applications to biological systems and tumor growth dynamics.

**Nov 2019 – May 2025 — Research positions (Postdoctoral/Researcher), Italy & Switzerland**

- CNR–IASI (Rome): Postdoc (Feb 2023–Nov 2024) and Researcher (Nov 2024–May 2025) on systems/synthetic biology, distributed filtering/control, tumor growth models, and lung mechanics modeling.
- Sapienza University of Rome (DIAG): Postdoc (Nov 2019–Oct 2020; Feb 2022–Jan 2023) on filtering and control of time-delay and networked systems; leader-following consensus.
- University of Milano-Bicocca: Postdoc (Jan 2021–Dec 2021) on chemical reaction networks and whole-cell modeling.
- EPFL (Lausanne): Visiting researcher (Jan–Mar 2023) on Neural ODE and universal approximation.

## EDUCATION AND TRAINING

**2016–2019 — Ph.D. in Control Engineering, Sapienza University of Rome**

- Thesis: LQ regulators and detection problems in non-Gaussian environments (final mark: with honors).

#### **2014–2016 — M.Sc. in Control Engineering, Sapienza University of Rome**

- Final mark: 110/110 cum laude.

#### **2011–2014 — B.Sc. in Industrial Engineering, Università Campus Bio-Medico di Roma**

- Final mark: 110/110 cum laude.

#### **2015–2016 — Erasmus, University of Nice Sophia Antipolis (France)**

- Mathematics Department.

#### **PERSONAL SKILLS**

- Mother tongue: Italian
- Other languages: English (very good); French (good).

#### **DIGITAL SKILLS**

- MATLAB/Simulink; LaTeX; C++; LabVIEW.

#### **RESEARCH INTERESTS**

- Stochastic systems; optimal control; filtering and estimation; time-delay systems; networked and distributed control; systems and synthetic biology; biomedical modeling.

#### **NATIONAL SCIENTIFIC HABILITATION**

- National Scientific Habilitation (ASN) for Associate Professor — ING-INF/04 (Nov 2023).

#### **HONORS AND INVITED TALKS (selected)**

- Student Honor (Master's degree in Control Engineering), Oct 2016.
- Invited talk: "Non-Gaussian filtering and control", Sapienza University of Rome, Sep 2018.
- Seminar: "Topics on filtering and optimal control for linear systems: non-Gaussian noise and sensor networks", EPFL, Sep 2022.

#### **ACADEMIC SERVICE (selected)**

- Associate Editor: Optimal Control Applications and Methods (since May 2023).
- Associate Editor: Transactions of the Institute of Measurement and Control (since May 2025).
- Conference Editorial Boards: IEEE CCTA (TCEB, since May 2023); IEEE ACC/CDC (CEB, since May 2024).
- Reviewer for journals including IEEE TAC, Automatica, IJ Robust and Nonlinear Control, IEEE TCNS, and others.

#### **PUBLICATIONS (selected)**

- Battilotti, S., Cacace, F., d'Angelo, M., Germani, A. (2019). The Polynomial Approach to the LQ Non-Gaussian Regulator Problem Through Output Injection. IEEE Transactions on Automatic Control.

- Battilotti, S., d'Angelo, M. (2019). Stochastic output delay identification of discrete-time Gaussian systems. *Automatica*.
- Cacace, F., Conte, F., d'Angelo, M., Germani, A., Palombo, G. (2022). Filtering linear systems with large time-varying measurement delays. *Automatica*.
- Battilotti, S., Califano, C., Cacace, F., d'Angelo, M. (2022). Stochastic Leader-Following for Heterogeneous Linear Agents with Communication Delays. *IEEE Transactions on Automatic Control*.
- Zakwan, M., d'Angelo, M., Ferrari-Trecate, G. (2023). Universal Approximation Property of Hamiltonian Deep Neural Networks. *IEEE Control Systems Letters*.
- Battilotti, S., Borri, A., Cacace, F., d'Angelo, M. (2024). Optimal discrete-time distributed Kalman filter with reduced communication. *IEEE Transactions on Automatic Control*.
- d'Angelo, M., et al. (2025). A PDE model of glioblastoma progression: the role of cell crowding and resource competition. *Mathematics*.
- Battilotti, S., Borri, A., Cacace, F., d'Angelo, M. (2025). A consensus Kalman filter on L2 spaces. *Automatica*.

*Note: This CV is a concise Europass-style version. Sensitive personal data have been omitted.*