TommasoMenara
PhD Candidate at University of California Riverside

contact

📍 Bourns College of Engineering, WCH 228, Riverside, CA, 92507

☎ +1 (949) 607-8776

✉ tmena002@ucr.edu

@ sites.google.com/site/tommasomenara

languages
English
Italian

programming
C | Java
Matlab & Simulink
Wolfram (Mathematica)
Processing (Arduino)

Education

2016–present	**Phd** Mechanical Engineering Network Neuroscience and Control Theory	University of California, Riverside
2013–2016	**Laurea Magistrale** (Master of Science equivalent) Robotics and Control Engineering	University of Pisa, Italy
2010–2013	**Laurea** (Bachelor of Science equivalent) Mechatronics Engineering	University of Padova, Italy

Publications

Conference proceedings

[C3]. T. Menara, V. Katewa, D.S. Bassett, F. Pasqualetti, *The Structured Controllability Radius of Symmetric (Brain) Networks*, IEEE American Control Conference. Milwaukee, USA, June 2018

[C2]. T. Menara, G. Bianchin, M. Innocenti, F. Pasqualetti, *On the Number of Strongly Structurally Controllable Networks*, IEEE American Control Conference. Seattle, USA, May 2017

[C1]. M. Laurino, T. Menara, A. Stella, M. Betta, A. Landi, *Procoagulant control strategies for the human blood clotting process*. 37th Annual Conference of the IEEE Engineering in Medicine and Biology Society. Milano Conference Center, Milan, Italy, August 2015

Experience

2016–present	**IEEE - IFAC** *Referee/Reviewer* Reviewer for international conferences such as: Conference on Decision and Control (CDC), American Control Conference (ACC), European Control Conference (ECC), International Conference on Control, Decision and Information Technologies (CoDIT), Conference on Control Technologies (CCTA) Reviewer for journals such as: IEEE Transactions on Automatic Control (IEEE-TAC), IEEE Transactions on Control of Networked Systems (IEEE-TCNS), IFAC Automatica.	University of California, Riverside
2016–2019	**Graduate Students Association** *Public Relations Officer* PR Officer in the Graduate Students Association. Responsible of organizing campus-wide social events. Management of the budget for social events. Vice-chair of the HUB Board of Governors.	University of California, Riverside
2017–2018	**Graduate Students Association** *International Student Affairs Officer* ISAO in the Graduate Students Association. Monitoring of campus issues and legislative developments that affect international graduate students. Member of different committees related to international education.	University of California, Riverside

2016–2017	**Graduate Students Association**	University of California, Riverside

MEGSA Representative
Mechanical Engineering Representative in the Graduate Students Association.

2015–2016	**Mechanical Engineering Department**	University of California, Riverside

Visiting Scholar
Research on strong structural controllability of network systems during a 6-months period.

2013–2015	**Department of Information Engineering**	University of Pisa, Italy

Student Projects

- Design, production and coding of an autonomous floor-cleaning robot.
- System identification of a Inertially Stabilized Platform (ISP). Developed controllers for the gimbals of the ISP.
- Modeled the humanoid robot Walkman (developed by the IIT Genova) in Simulink/Simmechanics. Combined Path Planning, Trajectory Tracking and Motion Control to make the robot achieve tasks while walking. Developed the steering function for a RRT algorithm to decide whether the connection between different states is feasible or not.
- Computer Aided Engineering (CAE) Methods: Modeling of mechanical parts and stress simulations using Solidworks.
- Identification of Uncertain Systems: Identification and parameter fitting of an electromechanical diesel engine actuator valve.
- Real-Time Systems: Developed a C graphic program (Allegro and Pthread libraries) in order to simulate the control of a DC motor controlled by a PID controller.

2012–2013	**Freescale Smart Cars Race**	University of Padova, Italy

Embedded Programmer
Developed a variable structure PID to control a smart car using the inputs from two linear vision sensors. Design of various modifications to the car chassis, such as camera mounts and LED circuit board to improve performances.

2012-2013	**Lionbridge**	Work from home job

Internet Assessor
Reviewer of the quality of search engines' results.

Communication skills

2016-present	**Oral Presentation**	IEEE Conferences

Presented the research I conducted for the papers [C2], [C3].

2018	**Talk**	University of California, Riverside

I gave a talk on cluster synchronization on network of Kuramoto oscillators during the Mechanical Engineering Symposium.

2016	**Poster**	Workshop on Brain Dynamics and Neurocontrol Engineering, WUSTL

I created a poster on structural controllability of anatomical brain networks and presented the results at WUSTL.

Awards

2016	**Dean's Distinguished Fellowship**	University of California, Riverside

Fellowship awarded based on student's academic performance and project proposal. Fellowship guarantees stipend and full coverage of tuition for two years in the Ph.D. program.

Interests

I love traveling and discovering different cultures. I like to unwind by performing outdoor activities or trying new foods.

Hobbies: passion for technology, neuroscience, cooking, music, philosophy, modern art and camping.

Sports: golf, skiing, tennis, swimming, hiking.