



Lucrezia Manieri

Ph.D Student
Information Technology
Systems and Control

Skills

Matlab and Simulink 4+ yrs.

LaTeX 3+ yrs.

**Optimization/
distributed algorithms** 1+ yrs.

C programming 1+ yrs.

Italian L1

English C1

Interests

- ▶ Music
- ▶ Fitness
- ▶ Cooking
- ▶ Ireland

Contact

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🌐 github/lucreziamanieri

in linkedin/lucrezia manieri

Biography

Lucrezia Manieri was born in Orvieto, Italy, in 1996. Curious and determined, with a passion for mathematics. She moved to Lecco after high school to study at Politecnico di Milano, becoming a rare specimen of commuting transfer student. She graduated *cum laude* in October 2020 and she is currently enrolled in a PhD program in Information Technology, mainly focused on the integration of stochastic model predictive control within a distributed optimization framework.

Education and Training

Research assistant | PhD student

Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB)
Advisor: prof. Maria Prandini
Politecnico di Milano

Nov. 2020 - today

The research project addresses the extension of distributed optimization to feedback control of large-scale multi-agent systems. It investigates the integration of Stochastic Model Predictive Control (SMPC) and stochastic filtering in the mentioned framework, possibly tackling issues arising from the computational complexity of the optimization problems and/or the need to preserve the privacy of local information.

M.Sc. Automation and Control Engineering

Supervised by prof. Maria Prandini
and prof. Alessandro Falsone
Politecnico di Milano

Sept. 2018 - Oct. 2020

Graduated *cum laude* within the Honours Programme "Scientific Research in Information Technology" (DEIB). Master thesis addressing the resolution of large scale MILPs via multi-agent reformulation.

B.Sc. Automation and Control Engineering

Graduated *cum laude*
Politecnico di Milano

Oct. 2015 - Sep. 2018

Work Experience

Teaching Assistant | Basic Control Engineering

B.Sc. degree - Automation Engineering
(prof. Luigi Piroddi)
Politecnico di Milano

Mar. 2021 - Jun. 2021

Publications

- Manieri, L. & Falsone, A. & Prandini, M. (2021). "Hyper-graph partitioning for a multi-agent reformulation of large-scale MILPs.". In: *IEEE Control Systems Letters*, 6, 1346-1351.

AUTORIZZO AL TRATTAMENTO DATI AI SENSI DEL GDPR 2016/679 DEL 27 APRILE 2016 (REGOLAMENTO EUROPEO RELATIVO ALLA PROTEZIONE DELLE PERSONE FISICHE PER QUANTO RIGUARDA IL TRATTAMENTO DEI DATI PERSONALI).

AUTORIZZO LA PUBBLICAZIONE SUL SITO ISTITUZIONE DEL POLITECNICO DI MILANO (SEZ. AMMINISTRAZIONE TRASPARENTE) IN OTTEMPERANZA AL D. LGS N. 33 DEL 14 MARZO 2013 (E S.M.I.).