UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II

DOTTORATO DI RICERCA / PHD PROGRAM IN
INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Seminar announcement

Monday 16th January 2026, Time: 11:00 - 12:00
Room B – Centro Congressi, Via Partenope, 36 - NAPOLI

Prof./Dr. Claudia Archetti

University of Brescia, Brescia, Italy,

Department of Economics and Management

https://www.unibs.it/en/ugov/person/3039

Email: claudia.archetti@unibs.it

Bilevel optimization and reinforcement learning for last-mile delivery problems

Abstract: Last-mile delivery is defined as the last leg of the distribution plan, whereby products are delivered from the last point in the supply chain to the final destination. Optimizing last-mile delivery operations have become crucial, especially due to the explosion of e-commerce where deliveries are dispersed and requirements for (very) fast service is pressing.

In this talk we explore opportunities for optimizing last-mile delivery services thanks to AI-driven techniques, namely reinforcement learning, and advanced optimization, specifically bilevel optimization. We will show applications of these techniques and provide insights into their potential practical benefits.

Lecturer short bio: Claudia Archetti is Full Professor of Operations Research at University of Brescia. From September 2021 to September 2024, she was Full Professor in Operations Research at ESSEC Business School in Paris. The main areas of the scientific activity are: models and algorithms for vehicle routing problems; mixed integer mathematical programming models for the minimization of the sum of inventory and transportation costs in logistic networks; exact and heuristic algorithms for supply-chain management; reoptimization of combinatorial optimization problems. She is author of more than 100 papers in international journals. She is co-Editor in Chief of Networks. She was VIP3 of EURO, the Association of European Operational Research Societies, in charge of publications and communication.

For information: Prof. Claudio Sterle (DIETI, UniNA) – claudio.sterle@unina.it *(organizer)*
Prof. Maurizio Boccia (DIETI, UniNA) – maurizio.boccia@unina.it *(organizer)*
Prof. Adriano Masone (DIETI, UniNA) – adriano.masone@unina.it *(organizer)*