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FACULTY OF
MANAGEMENT
DATA SCIENCE AND
ANALYTICS
DEPARTMENT

DEPARTMENTAL
SEMINARS

12 MAY 2026

13:00-14:00



Microsoft Teams
(Online)

Meeting ID: 366 459 357 079 599
Passcode: a8en2b6m



Dr. Zangir IKLASSOV

Combinatorial Optimization, Planning and Scheduling, Reinforcement Learning, and Reasoning with Large Language Models

ABSTRACT: This talk will present recent advances in learning-based methods for combinatorial optimization, with a focus on planning and scheduling problems. I will begin with job-shop scheduling, showing how reinforcement learning can be used to learn size-agnostic dispatching strategies that generalize across problem scales. I will then discuss stochastic vehicle routing, where uncertainty in demand and travel times, together with external factors such as weather, makes classical deterministic assumptions insufficient. Finally, I will turn to the emerging role of large language models in combinatorial problems, highlighting recent work on self-guided exploration and decomposition-based reasoning for tasks such as routing, scheduling, and packing. Overall, the talk will illustrate how reinforcement learning and LLM-based reasoning can complement traditional optimization methods and open new directions for solving complex decision-making problems.

SHORT BIO: Zangir Iklassov is an Assistant Teaching Professor and Research Scientist at Mohamed bin Zayed University of Artificial Intelligence (MBZUAI). His research focuses on combinatorial optimization, planning and scheduling, reinforcement learning, and reasoning with large language models. His recent work explores learning-based methods for job-shop scheduling, stochastic vehicle routing, and LLM-guided approaches for solving combinatorial problems.