



Research School for Operations  
Management and Logistics

**Artificial Intelligence for Datadriven Logistics**

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Current breakthroughs in Artificial Intelligence are exciting for games like Go and Chess, where it is crucial to anticipate unknown moves of the opponent. When making logistics decisions, it is equally important to anticipate the arrival of new data (e.g., orders, delays, and disruptions). For many such problems, Deep Reinforcement Learning algorithms like AlphaZero have been demonstrated to be game-changers. The logistics sector recognizes the opportunities and is eager to adopt deep reinforcement learning. However, companies struggle to translate the abstract possibilities of deep reinforcement learning into solutions for their own logistics problems. To address this challenge, we aim to develop a toolbox that contains the tools to rapidly model and solve logistics problems with Deep Reinforcement Learning, preferably using zero-code solutions. The toolbox will be tested by using it to solve concrete logistics problems at one or more of our ten project partners.