

AI for Resilient Synchromodal Transport Decision Support System

Problem description

Synchromodal transport introduces a flexibility feature into a multi-modal freight transport, allowing the network to respond better to operational disruptions in real-time. Operators will need to handle complex scenarios in relatively short time to respond to disruptions. The goal of this project is to develop a RL technique to assist operators with this task.

Objectives and assignment

The objective of this thesis is to enhance an existing decision support system by incorporating advanced reinforcement learning techniques for resilient synchromodal transport. The student will focus on integrating deep reinforcement learning to improve scalability and enable the system to handle more complex operational challenges.

Candidate background

TIL and CS Students who have knowledge and interest in machine learning and AI and interested multi-modal (freight) transportation as well as machine learning.

Research group

This research will be done at Freight and Logistics Lab. For more information please contact m.saeednia@tudelft.nl.

