Gantry Crane Scheduling in Seaports - An efficient algorithm for a subproblem as a working horse

This presentation outlines typical setups of rail-mounted gantry cranes handling containers in a seaport terminal and formalizes scheduling problems. Regarding solution methods we, first, focus on a subproblem, a corresponding graphical model, and efficient solution methods and, afterwards, show how these can be employed in algorithmic frameworks to tackle the wholistic scheduling problems.