

# A MULTI-AGENT SYSTEM WITH BLOCKCHAIN FOR CONTAINER STACKING AND DISPATCHING.

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## ABSTRACT

Port Logistical Supply chains play a very important role in society. Their complex and adaptive behaviours promote the suggested applications of combining a multiagent system with blockchain for solving complex problems. Several technologies have been proven positively to work in logistics, however the concept of combining converging technologies such as blockchain with deep reinforcement multi agent is viewed as a novel approach to solving the complexity that is associated with many facets of logistics. A simulator was developed and tested for the problem of container stacking. The simulation results indicate a more robust approach to currently used tools and methods.

**Keywords:** Multi Agent, Blockchain, Multi-agent Simulation, Container Stacking Management