

ConstructionBots: A Julia package for multi-agent simulation

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Summary

ConstructionBots is an open-source multi-robot manufacturing simulator and is designed to test algorithms for multi-robot assembly planning. This system approaches multi-robot assembly planning from a higher level of abstraction and addresses task planning and transit planning, while abstracting away the kinodynamic details of piecing together assemblies. The problems addressed and simulated by this package include: - Transport Team Configuration - Spatial Layout of the Construction Site - Sequential Task Allocation and Team Forming - Collision Avoidance with Heterogenous Agent Geometry and Dynamics

Statement of need

ConstructionBots is a Julia package for multi-robot simulations.

Citations

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References