Abstract

As an emergent research area by which swarm intelligence is applied to multi-robot systems; swarm robotics (a very particular and peculiar sub-area of collective robotics) studies how to coordinate large groups of relatively simple robots through the use of local rules. It focuses on studying the design of large amount of relatively simple robots, their physical bodies and their controlling behaviors. Since its introduction in 2000, several successful experimentations had been realized, and till now more projects are under investigations. This paper seeks to give an overview of this domain research; for the aim to orientate the readers, especially those who are newly coming to this research field.

References

An Overview of Swarm Robotics: Swarm Intelligence Applied to Multi-robotics

245-260.


Index Terms

Computer Science

Artificial Intelligence

Keywords

Swarm robotics applications, swarm robotics simulators, swarm robotics problems classification.