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Robot Dispersion

Robots are quickly becoming mainstream devices that are required to do jobs that are dirty, boring, or dangerous for humans. With the ever-increasing need for robots to do these jobs, the need for more intelligent robots is growing. A specific task that humans have great interest in using robots for is reconnaissance missions. The military makes use of robots to go into potentially dangerous environments to map the environment and find items of interest such as wounded soldiers. I'm investigating using small, inexpensive robots that use wireless intensity signals instead of sophisticated sensors and odometry to disperse within an unknown environment. Using wireless intensity signals as the primary way of communication the robots can be kept very cheap and, pending results, I hope to see that a large swarm of small, inexpensive robots can more efficiently disperse and set up a sensor network within an unknown environment as compared to using large, expensive robots with sophisticated sensors.



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