



entropy



*Special Issue Reprint*

## **Swarms and Network Intelligence**

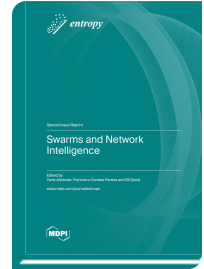
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This reprint covers a wide range of topics related to collective intelligence, exploring the interplay between swarm intelligence, network intelligence, and other emerging technologies. The first set of chapters focuses on the behavior and mechanisms of swarming. One chapter describes a locust-inspired model of collective marching on rings, while another demonstrates the experimental validation of entropy-driven swarm exploration under sparsity constraints using sparse Bayesian learning. These studies provide new insights into the principles of swarming and its potential applications in fields such as robotics and mobile crowdsensing. The next set of chapters discusses the integration of swarm intelligence with other emerging technologies such as deep learning and graph theory. These studies show how swarm intelligence can be combined with other advanced technologies to solve complex problems and improve decision-making processes. The reprint also covers the topic of network intelligence, including the study of social network analysis, Twitter user activity, and crowd-sourced financial predictions. These studies provide insights into how network intelligence can be harnessed to understand social dynamics and improve decision-making processes in various domains. The reprint concludes with a chapter that proposes a generative design approach for the efficient mathematical modeling of complex systems.



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