Simon Garnier

Assistant Professor, College of Science and Liberal Arts at New Jersey Institute of Technology

Newark, NJ, US

Professor Garnier focuses on the study of collective behaviors and swarm intelligence in natural and artificial systems

Biography

As principle Investigator of the Swarm Lab, Garnier performs interdisciplinary research that studies the mechanism underlying the coordination of large animal groups, such as any colonies or human crowds. Garnier has a substantial record in academic research and scientific communication. Garnier has broad experience in all aspects of data analysis, behavioral studies and teaching. He is interested in academic and corporate work involving the analysis of behavioral data and the development of applications for the study of large scale behaviors in animal groups, collective robotics and/or human social networks.

Areas of Expertise

Biological Sciences, Swarm Robotics, Interdisciplinary Education, Collective Behavior, Swarm Intelligence, Artificial Intelligence

Affiliations

Swarm Lab, Entomological Society of America, The Swarm Intelligence - Editor

Event Appearances

We the Swarm: lessons in problem-solving from tiny brains and neuron-less creatures
In Entomology Colloquium

Not so smart after all: How to solve problems with no neurons and too many brains
In Coffee @ Beyond

From Blob to Mob: my random walk through complex systems
In Collective Behavior Seminar Series

Of robots and ants: a brief history of biological and bio-inspired self-assembly
In XXIII Simpósio de Mirmecologia: An International Ant Meeting

The lab who stares at goats - Tools and toys to study the role of vocal communication in organizing collective movement
In Collective Motion 2016

Living Architectures: Autonomous Self Assembly and Disassembly in Army Ants
In 9th EAI International Conference on Bio-inspired Information and Communications Technologies

How Millions Become One - The Biological Principles of Swarm Intelligence
In Nonlinear Science & Mathematical Physics Seminar

Education

Université Paul Sabatier (Toulouse III)
Ph.D. Behavioral Science, Swarm Intelligence

Université Paul Sabatier (Toulouse III)
M.S. Neuroscience, Behavior and Cognition

Université Bordeaux II
B.S. Biochemistry, Cellular Biology and Physiology

Accomplishments

DARPA Young Faculty Award
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