

Kōan 8: “Useful” robot collaboration from local rules

*Do you have other ideas?
Feel free to be creative!*

- Implement a swarm of simple robots of your choice in a large virtual environment
- Use biological systems as inspiration, e.g. a flock of birds or school of fish.
- Under “normal” behavior individuals follow three rules
 - Move in the same direction as your neighbours
 - Remain close to your neighbours
 - Avoid collisions with your neighbours
- There are two main events that trigger a reaction:
 - Response to a predator attack* (escape)
 - Response to food (gather)
- How to model these reactions?



* <https://youtu.be/m9mn7EB1H6k>