

The following is a collection of notes derived from the analysis of this paper: [PDF]

Overview

In this paper, we focus on determining how we can control swarms to perform the following two specific tasks:

1. Shape Formation: We'd like to coordinate our swarm of UAVs in order to create certain structures, like the school of Moonfish were able to in the movie *Finding Nemo*.
2. Area Exploration:

PSG-IMC: The Algorithm

PSG-IMC Applied to Shape Formation

Convergence Proofs

PSG-IMC Applied to Area Exploration