



Mission planning for defense against an attacking swarm

Problem Statement

- How should DoD assets be defended against potential large-scale drone attacks?
- What are minimum defense capabilities (numbers and platform specifications) to ensure success?
- Prior work showed proof-of-concept; how to extend to real, operational contexts?

Solution:

- Partner with GBAD / PEOLS / MARCORSYSCOMM to add functionality to address real-world threats

Impact

- Create a tool that could help shape operational planning in large-scale drone and swarm combat.
- Use optimization protocols to build “playbook” of defense strategies against various kinds of autonomous attacks.
- Build relationship between NPS and GBAD/PEOLS/MARCORSYSCOMM

Transition

- MARCORSYSCOMM has endorsed this project (see letter of support); successful project will likely lead to future funding.
- PIs are in active discussions with Triton Systems (a private firm) for a larger proposal on this topic to DARPA / ONR
- PIs submitting proposal on complimentary topic to ONR Science of Autonomy program.