

Agile Trajectory Generation for Tensile Perching with Aerial Robots



Progress Update

Main focus is around Interim Report

- Introduction - 1st draft stage
- Background - Approx 70% Complete
 - Perching Techniques - TODO
 - Existing Work - Done
 - Reinforcement Learning - 2nd draft stage
 - Inverse Reinforcement Learning - 1st draft stage
 - Reinforcement Learning from Demonstration - half 1st draft, half in note form
- Project Plan - in note form
- Evaluation Plan - TODO

Project Aim

- Design and Implement a Framework for Learning Agile Perching Trajectories from Non-Expert Demonstrations.
 - Using a small number of demonstrations to perform the required task.
 - Following demonstrations the agent should improve energy efficiency while still completing the perching task.
 - Not following a target trajectory - instead the agent will need to understand the goal of the task (IRL).

Plans Until Next

- Largely be focussed on the Interim Deadline for the next 2 weeks

Questions

- Experimental Ability - How does this get organised?
- When will we find out 2nd markers?