Abstract

Masters of Engineering Degree (Mechanical) *(or Aerospace or Engineering Mechanics)*

Project Title:

Integrating New Sensors with LTLMoP

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Abstract:

LTLMoP (Linear Temporal Logic Mission Planning) is a toolkit developed in Cornell Autonomous Systems Lab that takes in user-defined task specifications in structured English and outputs control commands to the robot accordingly. It bridges the gap between human and robots and simplifies interactions between the two by intelligently converting human language to machine instructions. This project aims to add new sensors to an existed robot in the lab and integrate the sensors with LTLMoP. It helps facilitate the ongoing research in LTLMoP and examine its compatibility on different objects.

In this project, different handlers are created in LTLMoP in order to interface with the robot and sensors. The robot is then tested to accomplish a specified task using the sensors in a customized map.