

Robotic Boat Launcher (iBoatic) – Capstone Project

Sheridan College

Professor Involved:

Prof. Aravind Venkatapathy

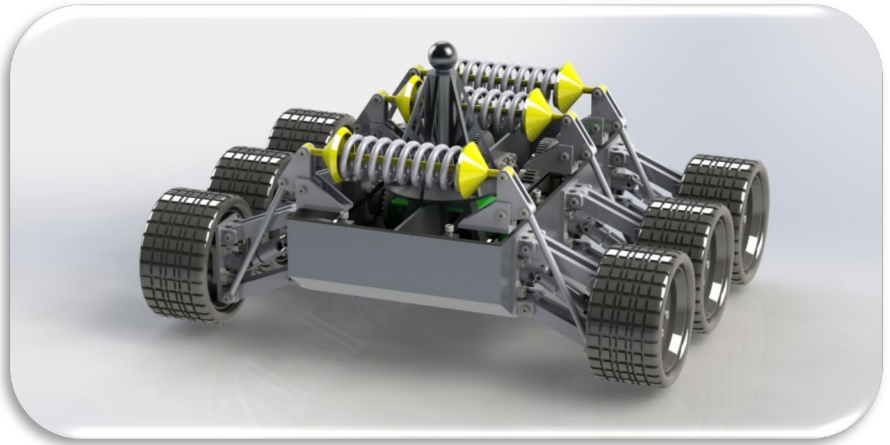
Students Involved:

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Project Background and Description

An enjoyable weekend activity for many people is taking their boats to the lake and enjoying a relaxing time. There is one frustrating thing that one must overcome first, attempting to get their boat into or out of the water. This can be a dangerous and time-consuming task without an excess amount of care and practice. This is where our boat launcher comes into the picture.

Project Scope

The purpose of this project is to design and develop a robotic boat launcher. This boat launcher would work off the premise that you use your current trailer for your boat, but you would use the boat launcher as transport and to launch the boat into the water. Due to where boats are kept, it would need to be capable of operating in different environments such as, being waterproof so the internals do not get wet and damaged or going over uneven surfaces. The mechanical design is as important as the electrical design as the boat will need to be operated from a distance. This means that there would be no physical connection from the controller to the boat launcher itself. The boat launcher would be operated from a physical controller or by your own cell phone with or without cellular connection.

Deliverables

- Virtual Model (3D)
- Raspberry Pi Program
- Scaled Model

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