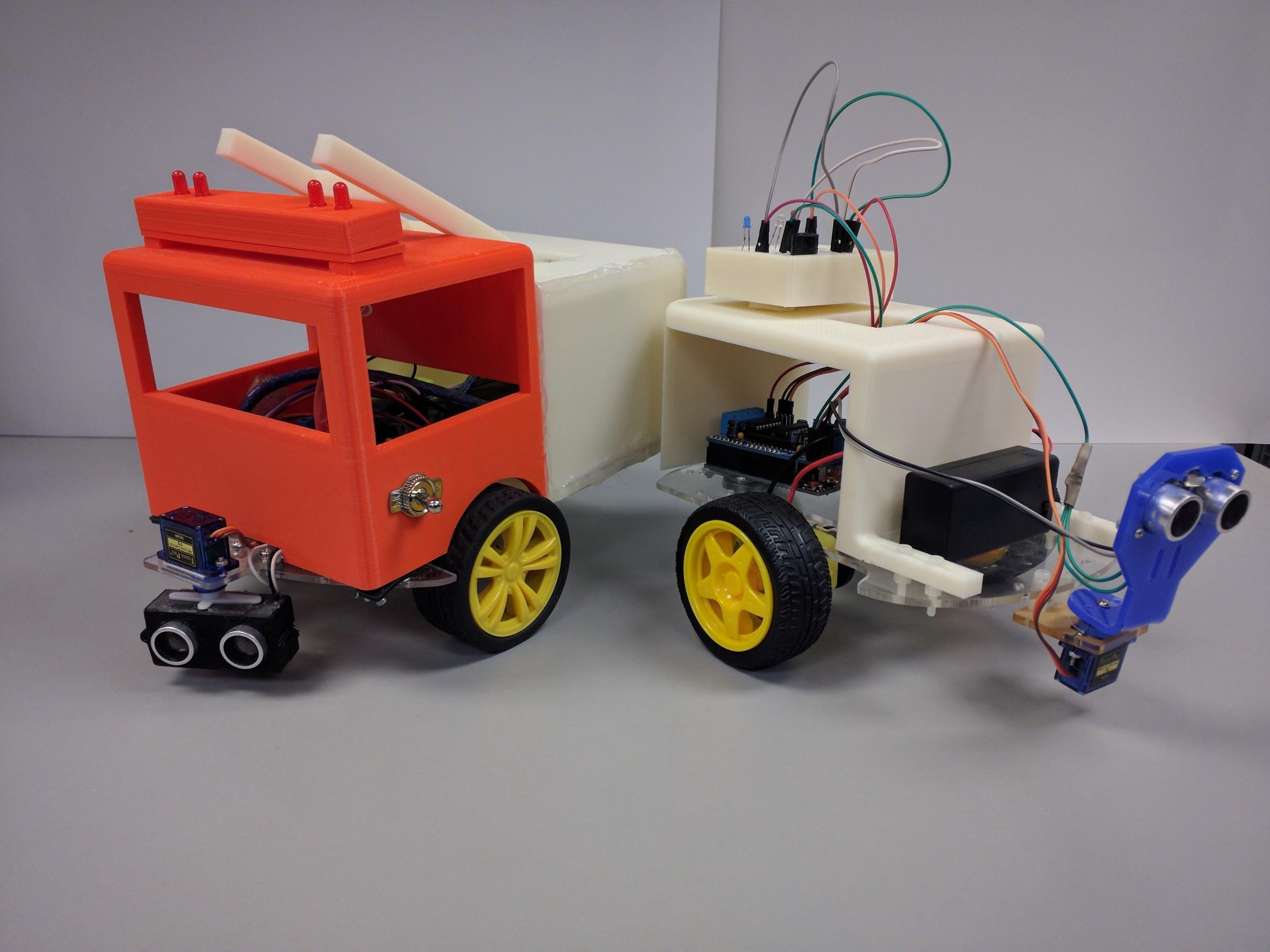
**iCREAT I: Module 7 - Arduino Motor Shield (cont.) &** **Strategies for Collision Avoidance**

horizontal line

# Objectives

* Learn how to use an Arduino motor shield (cont.).
* Learn and understand basic strategies for collision avoidance that could be used for the project.

# Activities

* Get familiar with [**Adafruit Motor Shield**](https://www.adafruit.com/product/81) V1.0.
* Get familiar with the full documentation for the “[***Adafruit Motor Shield***](https://cdn-learn.adafruit.com/downloads/pdf/adafruit-motor-shield.pdf)”.
* Get familiar with the Adafruit motor shield to control a servo, and 2 DC motors.
* Get familiar with some basic Collision Avoidance Algorithms.

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# TABLE of CONTENT: Module 7

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Topic** | **Activities** | **Faculty** |
| **Module 7** | | | |
| 1 | **How to control a Motor Controller Shield using an Arduino (cont.)** | Present: **iCREAT I - Module 6 - Coding with Arduino V** |  |
| 2 | **LAB (cont.)** | **LAB**: **iCREAT I - Module 6 - LAB 2- Arduino Motor Shield** |  |
| 3 | **Basic strategies for Collision Avoidance Algorithms** | Present: **iCREAT I - Module 7 - Coding with Arduino VI** |  |
| 4 | **LAB** | **LAB**: **iCREAT I - Module 7 – LAB- MicroMouse Integration: Motors, Sensors, and Coding**  **File to Review: MotorTest-iCREAT-Skeleton\_Solution** |  |
| 5 | **Project Requirements**  **Homework**  **“Module1 - Lab-Final Project Requirements”** | HOMEWORK: Use **iCREAT I - Module 1 - LAB Final Project Requirements** to complete your team’s proposal. |  |
| 6 | **To prepare for the next Module, watch videos and take notes** | **Videos for Module 8: Introduction to SolidWorks and Vernier Callipers** |  |