**University of Pittsburgh**

**Department of Electrical and Computer Engineering**

**ECE 1896: Senior Design Project – Spring 2019**

**Milestone Checkoff Form**

**Project Title**

Varmint Squirter

**Overall team goals to be accomplished during the evaluation period**

* Simulated power circuit.
* Demonstration of image segmentation running in real-time.
* Write embedded code to control 4 motors with both forward and backward rotation.

**Team Member #1**

Dave Anderson

**Deliverable / Demonstration for this checkoff cycle**

* Have the power distribution circuit fully simulated in LTSPICE, demonstrating that a 5V input has a regulated 5V and 3.3V output.
* Have a BOM produced for the power distribution circuit that is either ready for order or has been ordered from digikey.

**Team Member #2**

Ahmed Dallal

**Deliverable / Demonstration for this checkoff cycle**

* Demonstrate that the Raspberry Pi camera connected to the Raspberry Pi is able to run an image segmentation algorithm (snakes?) in real time and that it detects a printed image of a varmint.

**Team Member #3**

Sam Dickerson

**Deliverable / Demonstration for this checkoff cycle**

* Write embedded code on the STM32F303 Nucleo board that will control 4 stepper motors simultaneously – each motor is capable of forward and backward rotation independently. This step gets the wheels ready to be mounted on the frame that will be used in the final prototype.