## GSET - Programming with Mr. Hill

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Module 1 - Introduction to C++



#### Module 1 - Introduction to C++

- Workshop Structure
- A C++ Legacy
- Programming with Micro Controllers
- Tutorial 1 Hello World

# Workshop Structure

asdf

# Workshop Structure

### A C++ Legacy

### **Original TurtleBot**

(Discontinued)



#### **TurtleBot 2 Family**



TurtleBot 2



TurtleBot 2e



TurtleBot 2i



**TurtleBot Euclid** 

#### **TurtleBot 3 Family**

Burger



Waffle

Waffle Pi





# Programming with Micro Controllers

### Tutorial 1 - Hello World

- Overview: Finally, you are going to install the Turtlebot3 simulator in ROS. This is a 3D robot simulator that uses Gazebo.
- Assignment: Complete the tutorial in the document tutorial1 \_turtlebot3\_simulator.pdf on ilearn. You must be able to drive your turtlebot3 around the virtual arena.
- Deliverable: Write a one to two paragraph summary of what you accomplished and what you struggled with the most. Include an image of the Gazebo window after you have driven the robot around with the keyboard.
- ▶ **Next Week:** After completion of Module 5, you are ready to learn about robot navigation. You will learn to use the simulated Turtlebot3 to make a map a navigate in the Gazebo simulator.