

# Self Assessment

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Team: Software & Autonomous

- **Bluetooth RC Car & LFR:** I made Bluetooth RC Car and LFR as a “RoboSurgeon” team member.
- **Presentation on GPS, GNSS & Compass:** I made a presentation slide regarding GPS, GNSS and Compass. Also, I did present this slide in front of everyone.
- **HTML Web Page:** I did make HTML webpage. However, I could not show the sensor’s data in that dashboard.
- **IP Webcam with HTML:** I created HTML webpage that shows the mobile web camera by using IP.
- **ROS1:**
  - ▶ **Send Turtle Autonomously:** I wrote a Python code that takes input as a coordinate value (x, y), and as an output turtle moves autonomously to that specific point (coordinate) in Turtlesim in ROS1.
  - ▶ **ROS1 communication between two machines:** I did connect a device’s ROS Master to another device’s ROS system.
  - ▶ **ROS1 communication with ESP:** By writing Arduino code in Arduino IDE I uploaded this code to ESP32, and I showed the output in the ROS1 system.

- **Image Segmentation**: I wrote the Python (OpenCV) code for image detection, and it detects the image by leveling the class name and coloring the object. However, it could not do image segmentation by considering all the pixels.
- **Linux Boot System**: I have learned details about Linux Boot System.
- **Field Test**: On the day of the field test, I was every day and tried to observe everything from the field test.
- **3D Design in Fusion 360 (Mechanical)**: I did assignments 2, 3, and 4 of Mechanical Design in Fusion 360 by the given measurements that were mentioned in the questions.
- **Differential Drive (Kinematics)**: Currently I am trying to figure out the solutions to differential drive kinematic and angle-related problems.
- **Communication with Other Teammates**: As I was having around 6 nights, I have a very good relationship with all team members. I had such a good time with everyone in these few days.