# **Robot Builders Night Virtual for November 11th, 2025**

DPRG RBNV - Robot Builders Night Virtual - November 11, 2025 - YouTube

#### **Main Discussion Points**

### **Upcoming Robo Columbus Competition**

- Pat Caron initiated the meeting by providing details about the upcoming Robo Columbus competition in the Dallas area. Participants will use their robots to autonomously locate traffic cones arranged in a triangle.
- The event will be recorded and later published on YouTube for wider accessibility.

## **Member Presentations and Updates**

• Mark de la Chapelle introduced his project, a shop cart robot named IRA that integrates a local LLM server with Whisper CPP and Raspberry Pi for conversational capabilities and object detection.

## **Sensor Technology Challenges**

- Ray Caster shared his experiences with time-of-flight sensors, identifying issues with their performance in bright sunlight and potential solutions, like setting up visors and using polarizing filters.
- **Mike Williamson** elaborated on the navigation capabilities of his robots using LIDAR and time-of-flight sensors, showcasing data from sensor tests to highlight challenges like GPS accuracy and LIDAR's response to incline terrains.

#### **Robotic Platform Acquisition**

 Paul Bouchier spoke about the availability of discounted autonomous mowing platforms from Sensorio Robotics, offering them to the hobbyist community at a significant reduction from their original price.

#### **PCB Development for Micro Mouse**

 Matthew Komitsky updated attendees on his micro mouse PCB project challenges, specifically ordering errors and component compatibility, and his plans for testing motor integration.

#### **Issues with Visualization Tools**

• **Kareem** raised a query regarding difficulties with visualization in Fox Glove compared to Rviz, an issue shared by others and discussed as an area for further exploration.

# **Conclusions and Insights**

- The Robo Columbus competition is an exciting prospect requiring precision in sensor integration and navigational strategies.
- Community sharing, such as access to discounted robotic platforms, plays an essential role in making advanced projects more accessible to enthusiasts.
- Quality control and proper ordering with electronic components remain vital to efficient project development.
- Continuous sharing and collaboration in meetings are vital to learning and advancing robotics projects.

#### **Referenced Links**

• **Ed Mart** provided information on a commercially available toy truck similar to those used in members' projects: <u>Monster Jam Mega Grave Digger</u>.

The meeting concluded with participants looking forward to the upcoming competition and upcoming weekly engagements.