

# **Robot Builder's Night Virtual**

**April 8th, 2025**

## **Introduction**

The April 8th meeting of the Robot Builders Night Virtual gathered robotics enthusiasts to discuss various projects and challenges. Key topics included GPS systems for outdoor robots, the practicality of delivery robots, and recent changes in tariff regulations affecting robotic parts. Participants also shared resources and experiences related to their ongoing projects.

## **Main Discussions**

### **GPS Systems and SMA Connector Challenges**

- Ted Meyers discussed his outdoor robot equipped with a GPS unit, exploring options to shorten the antenna cable without signal degradation.
- Tom Crawford and Doug Paradis provided advice on crimping SMA connectors and maintaining signal integrity.
- The group shared experiences with buying connector supplies from sources like AliExpress.

### **Delivery Robots and Their Business Model**

- John K introduced the topic of delivery robots used by services like Uber Eats in Dallas.
- The group debated the logistical viability and business model of such robots, referencing issues observed in other cities like Toronto.
- Safety and practicality concerns were raised, including the potential for vandalism and navigation challenges.

### **Tariff Changes Impacting Robotics Supplies**

- Doug Paradis highlighted recent tariff changes that could affect the cost and availability of components, particularly for hobbyist robotic projects.
- The discussion touched on strategies vendors might use to mitigate these impacts, such as rerouting shipments through countries with no tariffs.

## Featured Projects and Updates

- **Mike Williamson:** Presented updates on his wall art rotator and the integration of ROS2 sensors for a robotic project.
- **Tom Crawford:** Shared a teardown video of the Unitree Go2 Robot Dog, discussing its design and capabilities.
- **David A Ackley:** Announced plans to enter a robot using a Waveshare General Driver Board into the upcoming RoboRama QuickTrip contest.

## Conclusions and Insights

- Practical advice was exchanged on handling antenna modifications and SMA connectors for GPS units.
- There was skepticism about the long-term viability of delivery robots without a robust business model.
- The impact of new tariff regulations on robotics parts emphasized the need for international purchasing strategies.
- Sharing experiences and resources continues to be a central theme, offering valuable support to newcomers and experienced builders alike.

## Referenced Links

- **Ed Mart:**
  - [Unitree Go2 Robot Dog Teardown Video](#)
- **Mark R:**
  - [Instructables Robot Contest](#)
  - [Arduino Two Wheel Self Balancing Robot](#)
  - [Server Robotics](#)
- **Pat Caron:**
  - [TI Document on Robotics](#)

This meeting highlighted the collaborative spirit of the robotics community and underscored the importance of adaptability in the face of regulatory changes.