

Video at <https://youtu.be/k5GEWMtaReY>

Main Discussion Points

Collaboration with University Robotics Clubs

- Paul Bouchier discussed ongoing collaborations with the UT Dallas and UT Arlington Robotics Clubs, including tours and outreach activities.
- Plans for a presentation on ROS and micro ROS for the UT Dallas Robotics Club were shared.

Robotics Projects and Competitions

- **Robo Columbus Challenge:** Participants discussed preparations, strategies, and equipment (e.g., GPS, RTK systems) used for the upcoming Robo Columbus challenge. The conversation highlighted the importance of accurate positioning technologies.
- **Micro Mouse Competition:** A new attendee, Matthew, described his entry into the micro mouse competition, focusing on algorithm development and control systems.

Technical Challenges and Solutions

- **GPS and RTK Positioning:** Several members, including Scott Gibson and Doug Paradis, shared insights on maximizing GPS accuracy using RTK modules and tackling positioning drift issues. Discussion revolved around the configuration of base stations and the challenges of real-world GPS use.
- **Motor Control for Mini Robots:** Discussions on motor control strategies, such as the use of PID loops, were introduced by participants working on micro robots.
- **Software and Tooling:** Conversations included the use of tools like Docker for development environments and testing, aided by resources from Articulated Robotics.

Community Events and Engagement

- Harold Pulcher introduced the Loyal Moses Christmas Print Drive, encouraging 3D printing contributions for charity, sharing various ways to participate and support.
- Upcoming meeting details for a Hackster DFW event where Karim will present his verbal robot interface were shared to encourage community participation.

Referenced Links

- **Paul Bouchier:**
 - [Sept 28 2024 monthly meeting talk on JTAG debugging, by Scott Gibson](#)
- **Ed Mart:**
 - [Boston Dynamics gripper-hand video](#)
- **Doug Paradis:**
 - [Carvera Air](#) – desktop CNC – current leader
 - [HiMill D1/D1S](#) – desktop CNC - Kickstarter
- **Ponder SomeMore:**
 - [GitHub - Grunt Docker](#)
 - [Meetup Event](#)
- **Harold Pulcher:**
 - [Printables Collection](#)