DPRG RBNV AI Summary – September 30, 2025

Video at https://www.youtube.com/watch?v=etOtt_1fuG8

DPRG News and University Collaboration

- **DPRG Updates**: Paul Bouchier confirmed the Robo Columbus event will be on November 22nd at a member's home in Farmersville, TX - a town east of Allen, TX.
- A recent meeting included robot clubs from UT Dallas and UT Arlington, sparking discussions on possible collaborations.

Robotics Demonstrations

- **Karim's Demo**: Featured a robot named Barney, a skid-steer robot exhibiting vision-based scene comprehension. The demo highlighted AI's ability to respond to verbal commands and describe its environment, showcasing the potential of AI in practical robotics applications.

Maker's Pet and SLAM Demonstrations

- **Mark R's Experience**: Mark discussed the modifications and testing of a Maker's Pet robot, emphasizing 3D printing customizations and improvements in model design.
- **Paul Bouchier's SLAM Demo**: Paul presented a demo using a Maker's Pet robot to perform SLAM, creating a real-time navigatable map and executing autonomous navigation tasks effectively.

Text-to-Speech in Robotics

- **Mike Williamson's Robot Voice**: Mike worked on enabling his robot to speak using the espeak library, enhancing feedback mechanisms for status updates. Piper, a more modern TTS library, was suggested as an alternative for more natural speech synthesis.

Serial Communication in Robotics

- **MicroPython Development**: Pat Caron explored MicroPython for robotic control, discussing the challenges of testing and developing with VS Code. Tools like pySerialTransfer were highlighted for efficient communication between microcontrollers and Python.

Referenced Links

- **Ponder SomeMore**:
    - Rhasspy Piper
- **Mike Williamson**:

    - eSpeak

- **Pat Caron**:
    - pySerialTransfer

The session concluded with an open discussion on various aspects of robotics, including testing strategies for MicroPython