

DPRG RBNV AI Generated Meeting Summary – Feb 11, 2025

- Paul Bouchier announces **bylaw changes election passed**, and **upcoming election for IT Officer and Vice president at Feb 22 meeting - please vote ahead of time** at <https://forms.gle/vwPtpnVTnWTJ7oAo9>; **Doug Paradis will present how to design PCBs with KiCad.**
- **Scott Gibson proposes a sumo contest**, presents his robots; Doug suggests rule flexibility for beginners. It's decided to have a mini-sumo exhibition with a competition if there are enough mini-sumo compliant robots; **kits are noted as an easy starting point.** Zumo kit: <https://www.pololu.com/product/4992> Scott's Sid Vicious has short-range sensors that trigger at 2" and cause full speed fwd to push opponent off ring. Sumo book (used ~\$6.50) : <https://www.amazon.com/Robot-Sumo-Official-Pete-Miles/dp/007222617X?>
- **Jai Sammpath presents the Limelight smart camera**, highlighting features like blob and April tag detection. It's compared to a Pixie cam and noted to be microcontroller-based. Jai shows the Iron Reign robot moving to track a sample piece and gets a gold star.
- Ted Meyers presents GPS tests, showing discrepancies between two units. The group discusses the timing and causes of GPS discrepancies including the ionosphere and two identical receivers tracking different satellites.
- Paul Bouchier discusses replacing DDS with Zenoh in ROS2, and notes that micro-ROS' XRCE DDS client depends on DDS and that it won't work with Zenoh
- Ray Casler investigates Openbot, noting **kits are unavailable** and there are pin assignment issues with ESP32. The group discusses its Android app.
- Tom C discusses line-following robot work; Carl Ott mentions a line follower simulator. Carl Ott describes his omni-wheel robot with 4 line arrays of pixels. Doug Paradis also describes using the simulator to test his robot in simulation.
- Carl Ott shares a link to **Ron Grant's master project for the Line Follower SIM:** <https://github.com/ron-grant/LFS>
- Carl Ott provides a link to the **DPRG clips on YouTube and the LFS:** <https://www.youtube.com/@DPRGclips/search?query=LFS>. Ray Casler shows high-speed line following robots.
- Blue Steel shares a link to a video of a **Super High Precision Line Follower Robot:** <https://youtube.com/shorts/9i8YNEN-EAU?si=r5TBCEM3GXknv4Jl>