Buying crap

Testing crap

- Goal setting

Baseline methodology current/remove GUI / PI upgrade/depth cam

- Object detection/avoidance and pathing
  - set a start point, outline with tape for reset
  - set up obstacle(s)
  - set goal/end point (mark on map)

  Results
  - Response time ← Quant
  - chosen path ← qual
  - navigation time ← Quant
  - end point accuracy/reliability ← Quant/qual relies on goal being consistent
  - ~~Ris~~ - Irregularities Quant/Qual
    - pause/stall time
    - hallucination

slam on/off during tasks

cost map - RViz toggle

capture card? RViz record? Path record on bot?

- ~~Re~~equipment
  - obstacles
    - bin/chair ~~/bike~~/drawers ← check detection first
  - stopwatch/script ← run on robot?

- Large area mapping ← is there an automated version?
  - set start point
  - set route/follow route
  - Record rviz? ~~Capture~~ ← CC?

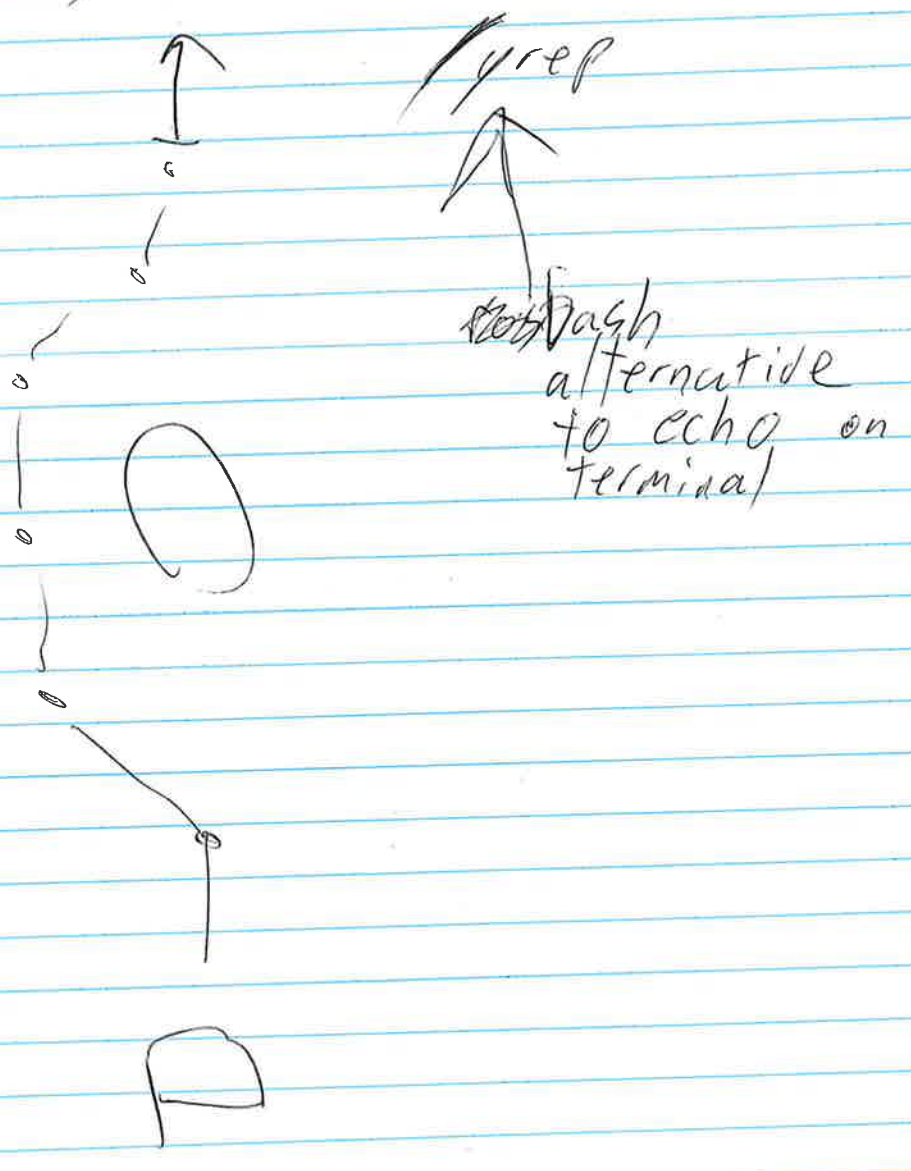
  Results
  - Map of room
  - Detected objects
  - ~~A~~Zones
  - Blind spots
  - mapping time ← if manual, scrap

Good
References
- how

articulated rob
- nav 2
" ros2 nav2 launch . . .

marker array
slam toolbox graph_visualisation
ros bag file?

Nipuni - doing ros for robinson



Exploration program

Diagnostic program

→ furthest euclidian distance

* calculated minimum

movement variance

Monte carlo analysis + plot

Buy the plan
- analyse updates

Jase for power dist improvement
└ he has cool stuff in mind

Sub goals are big for final

Robot sucks → motivation
- map not accurate/square

axing ~~Pitos~~ depth cameras

Ground-truth path

find
- Linux efficiency papers
- GUI vs no GUI robotics papers

Tmrw

inertial units

drift = dead reckoning

momentum
- limited cam integration

captions/labels within figure
- legend on outside

Convert tasks to Gantt
- times

Plan
- "more nuance"

Pi 5 turn off wayland?

Open SSH
- poke with stick

Appendix

"to allow training on future

Check headings

Problem statement has sus stuff

Motivation in wrong place
- big picture
  - lean into industry goals

Solution + diags
- More text, less

Problem statement
- break and shift into solution

Marker expectations
- vslam isn't finished
  - reduce

Explain more stuff?

QOL
Swap extending slam for diagnostics scripts
- "meaningful code contribution"

use depth cam as future work foundation
- openvslam

Nav stack onto pi 5

Swap to c++ "Claude"

vslam discontinued

ild in right dir
(peters sake)

symposium
vulcan driver

serial port

Get results
- exclude sensors — mention
- GUI vs no GUI
- Responsiveness
  - Sensor refresh rate
    - ROS data disposal
    - ultrasonic passes

mess with order
3 vs all
"degraded" performance due to this

Ticket

- Talk about power to DC
  - Jose for cable
- IMU on DC
  - compare to odometry
  - Overall kinematic comparisson

- 7.5 W FPGA without
- BNO 085

RETIRED DC

Plug robolaw back in

standoffs

Battery tests with depth Camera

5 Gbit/s — usb A-C for depth cam Dator

MIT Pneumatic print