

Robotics Roadmap

- Learn basic electronics (...now)
- 2-Wheel robot
 - Not much time.
 - Hopefully complete in early Nov.
- Underwater robot
 - Probably in Dec / Jan

Robotics Roadmap

- 2-Wheel robot
 - H-bridge motor driver
 - Gyro
 - PID Control (...mainly just Proportional)
 - Odometry (optional)
- What you can prepare...
 - Read up on Proportional controls
 - Use simulator at <https://a9i.sg/gears> and attempt the line following and gyro challenges

Robotics Roadmap

- Underwater Robot (...many decisions to make)
 - Control
 - Autonomous or Remote Control
 - Propulsion
 - Sealed motors, Brushless motors, or Canned pumps
 - PID Controls
 - Will need at least P and D
 - Position Control
 - Image recognition, distance sensors, or something else?
 - Where to test?

Robotics Roadmap

- What you can prepare...
 - Plan your teams (1 team or 2 teams?)
 - Read up on previously mentioned topics to better inform your eventual decision
 - Read up on “Sea Perch”. It’s a common underwater ROV design
 - Plan what parts you’ll like to purchase. It may take some time to deliver.

Contact

- Email me at any time if you need advice:
- cort@aposteriori.com.sg

Copyright

- Created by A Posteriori LLP
- Visit <http://aposteriori.com.sg/> for more tips and tutorials
- This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

