1. Introduction
   1. Problem-gap-hook :
   2. P: Water research time-intensive and expensive, but necessary
   3. G: No affordable water utility vehicles around anywhere
   4. H: Create one that measures WQ and depth for mapping purposes
2. Theoretical Framework
   1. Environmental Robotics
   2. Other similar robots/projects
   3. Basis of measurement methods (howto TDS, etc)
3. Methodology
   1. Overview of the robot
   2. Calibration of the sensors
   3. Test-runs
      1. Just floating around
      2. Position Hold
4. Results
   1. Maps of results
   2. Plots of results
   3. Comparison of hi-quality vs. Robot
5. Discussion
   1. Probes are highly sensitive, expensive tools = better
   2. Dependent on quality of Arduino script (a project in and of itself)
6. Conclusion
   1. It works
   2. It requires a lot of careful calibration
      1. And even then
   3. More expensive probes are of way higher quality (because of the high-quality software)

Introduction Structure:

A1: Freshwater is scarce -> we must maintain its’ quality

A2: What is water-quality, what does it concern with?

A3: Small ponds are also important

A4: Sensor technology is here -> cheaper then ever -> ~~turbidity example~~ importance of low-cost

A5: Robotics area here, to monitor the environment for us dunbabin2012

A6: Overlap between wq ecology sensing and robotics

Gap in understanding low-cost sensor technology

Gap in implementation strategies -> linking different data sources

A7: Hook: explain the project implementation of all this