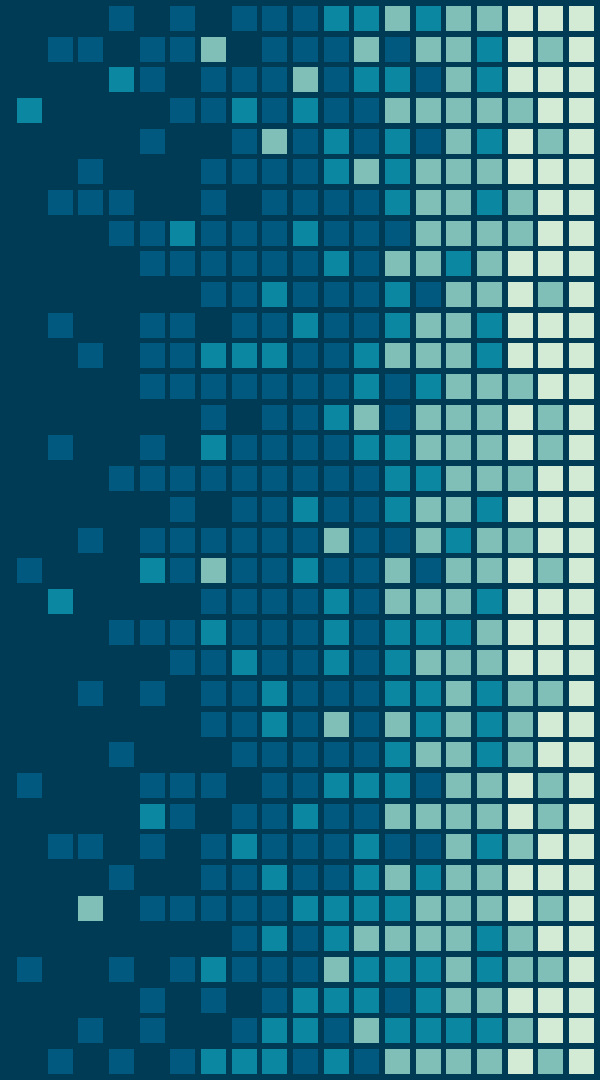


Preliminary Design Review Presentation

Firmware

Spring 2018

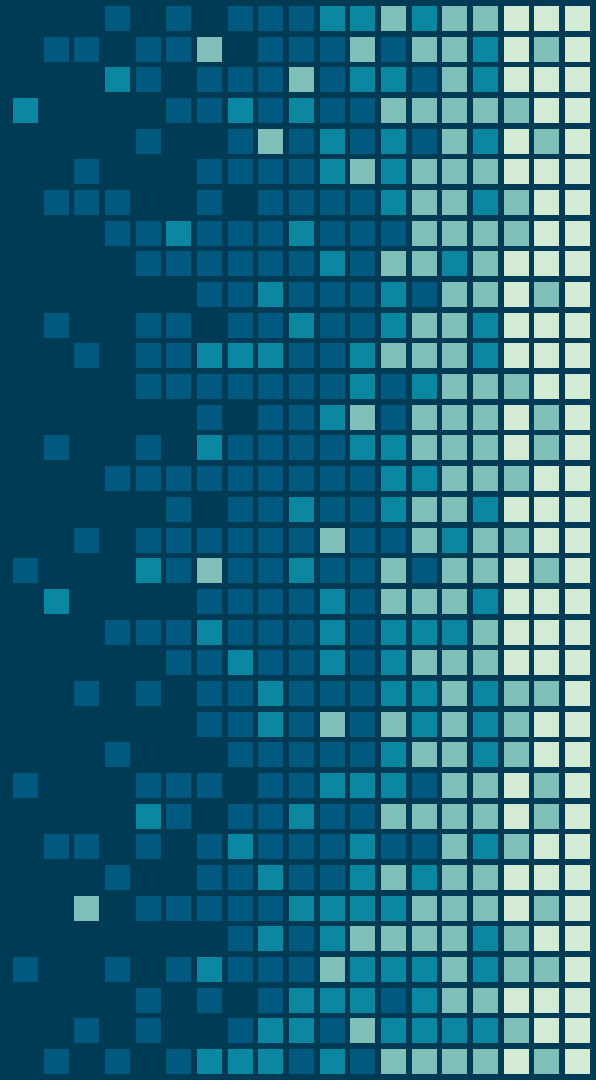


Ryan Li

Standing: Sophomore

Major/Track: Computer Engineer

EE396

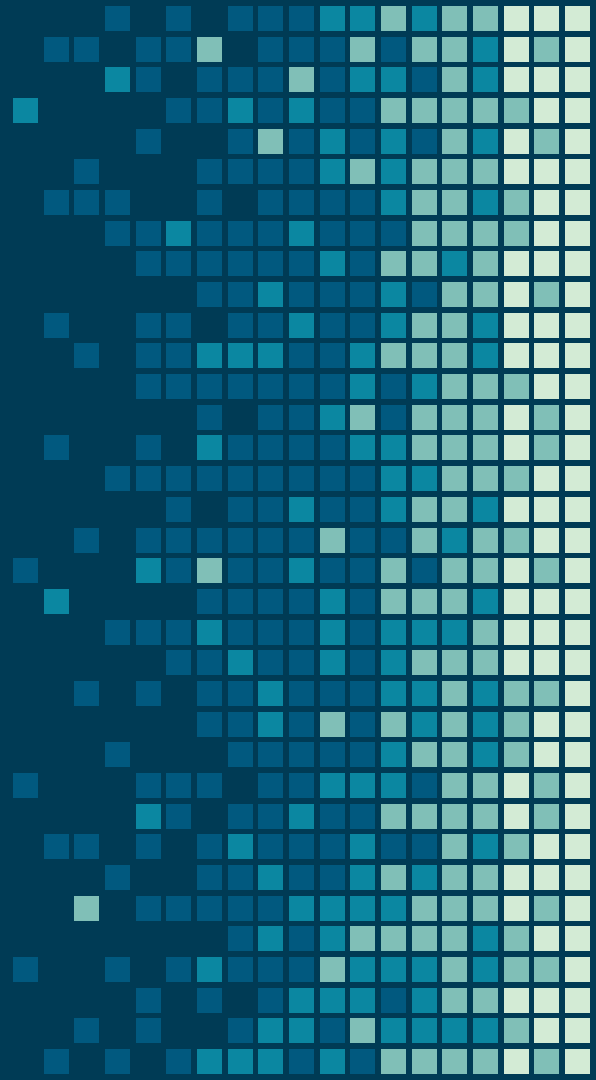


Kylie Lin

Standing: Junior

Major/Track: Computer Engineer

EE396

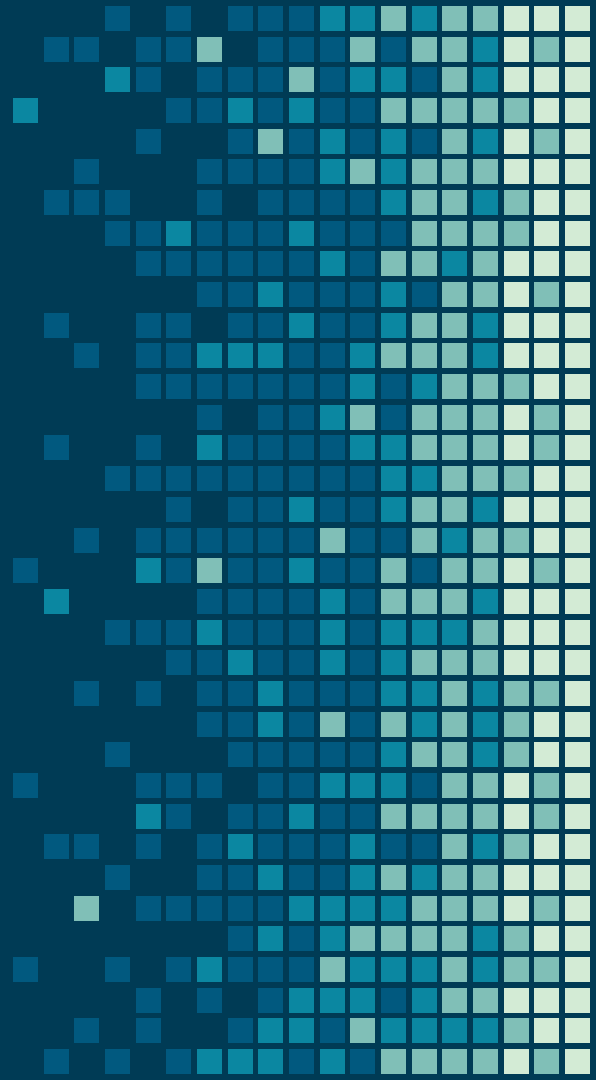


Kevin Liu

Standing: Sophomore

Major/Track: Computer Engineer

EE396



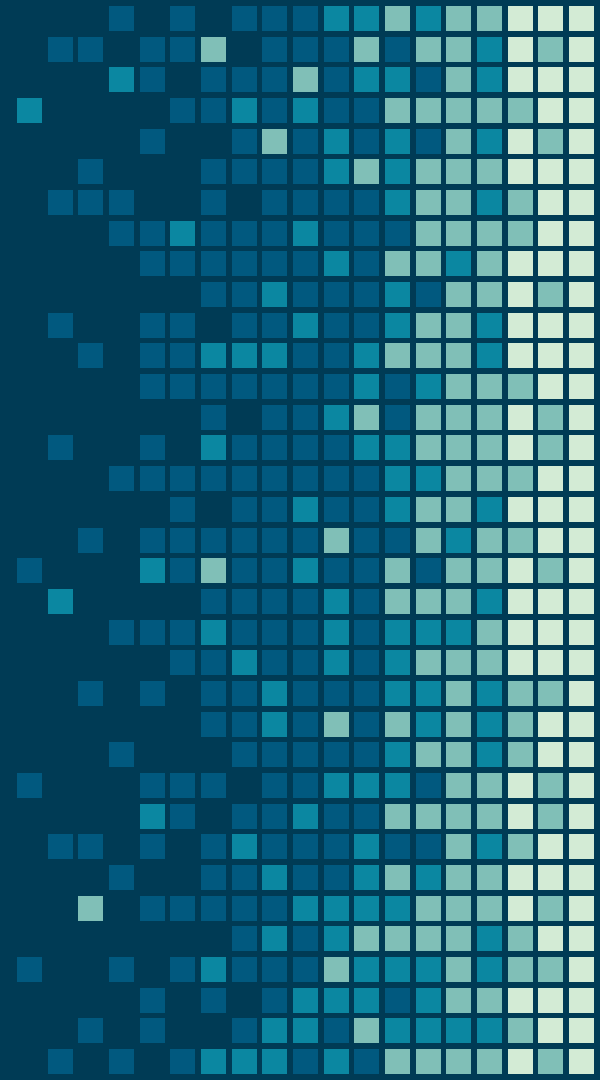
Jonathan Tu

Standing: Sophomore

Major/Track: Electrical Engineer -

Electrophysics

EE396



Andrew Obatake

Mentor

Dylan Tokita

Mentor

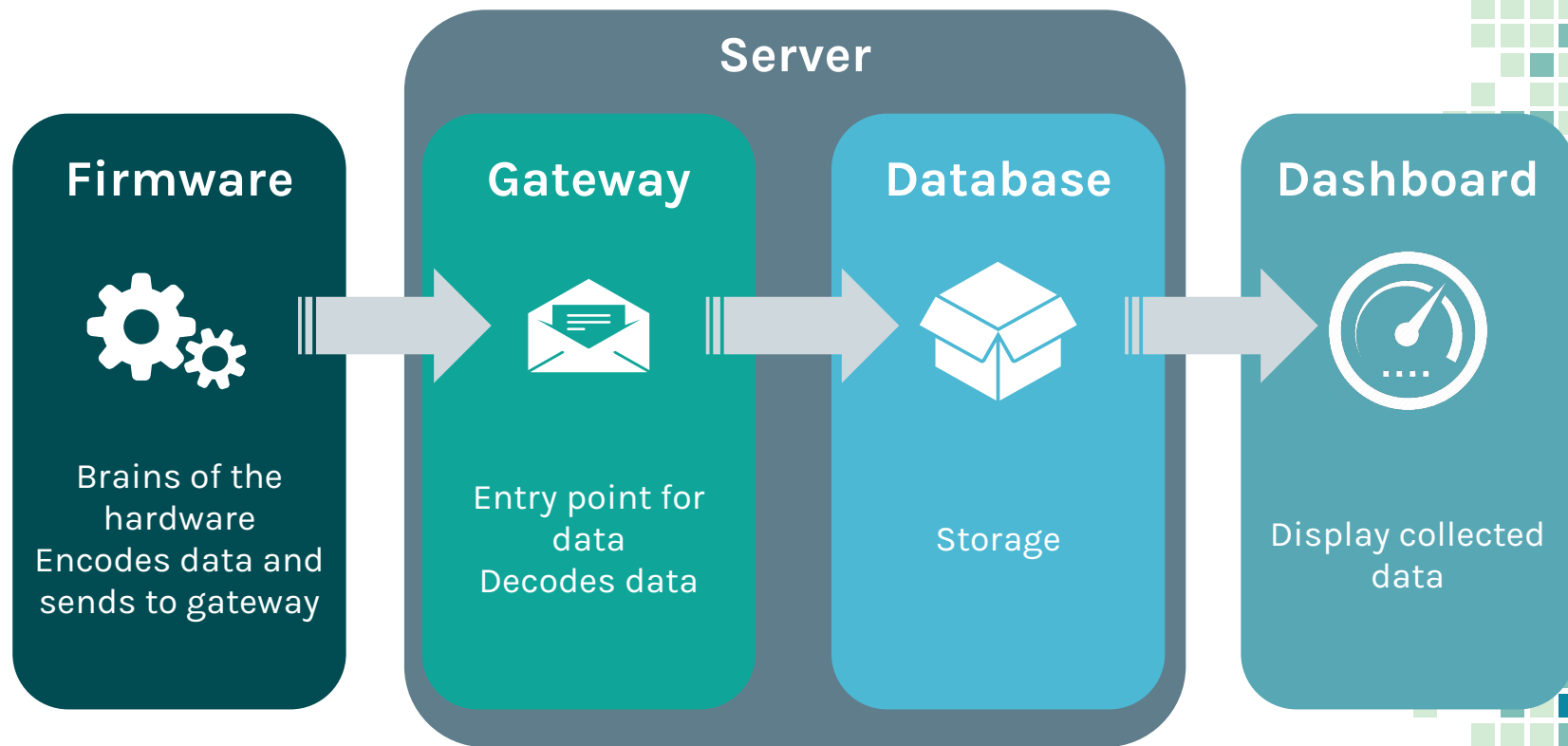


Overview

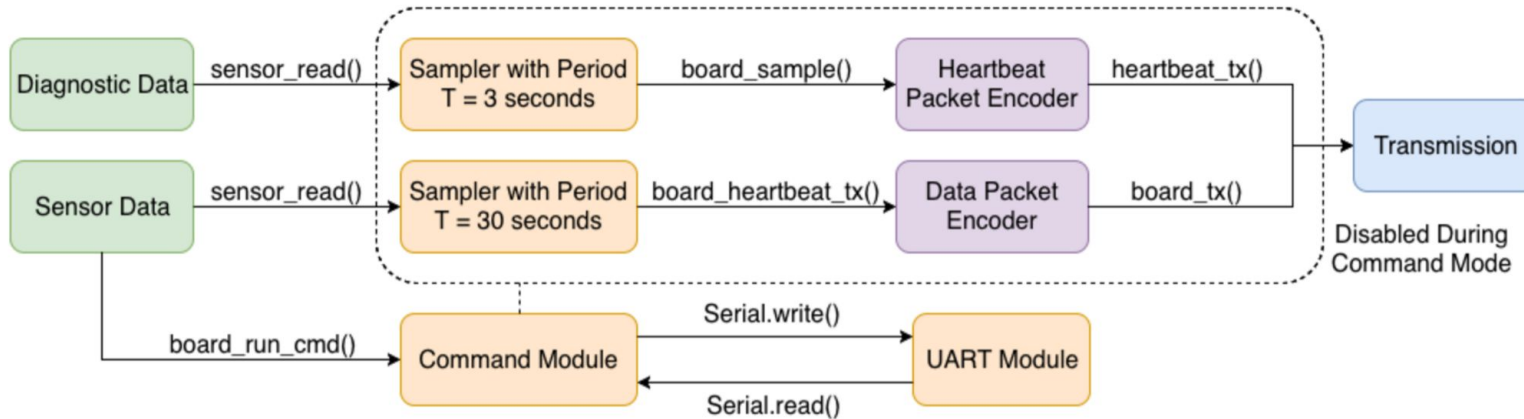
- Block Diagram
- Firmware Overview
- Progress
- Problems / Issues
- Gantt Chart
- Future Goals



Software Block Diagram

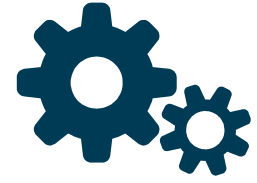


Firmware Functional Block Diagram



Firmware Block Diagram





Firmware Overview

- Sample data through sensors in weatherbox
- Package and transmit data through Xbee to Gateway
- Report status of weatherbox





Current Progress

- Incorporated Github/Git into workflow
- Integrated Snapdragon to firmware
 - Created files for gen_snapdragon
 - Wrote drivers for all sensors
 - Most sensors validated
 - Merged files into branch
 - Pushed branch to firmware



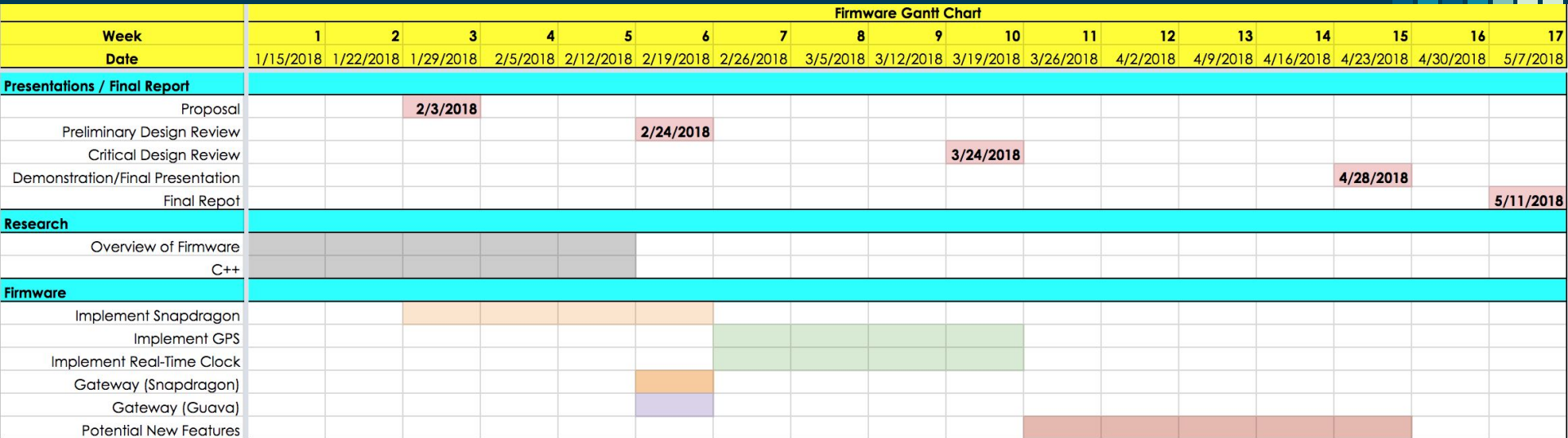


Problems / Issues

- Getting caught up with firmware
- Implementing Snapdragon
 - Typos
 - Documentation
 - Debugging Code
- Unfamiliarity with boards/sensors



Gantt Chart





Future Goals

- Finish Integrating Snapdragon
- Deploy Weatherboxes
- Begin Implementing Sensors
 - GPS
 - Real-Time Clock
- Assist with Software for teams



Questions?

