EE/CprE/SE 492 BIWEEKLY REPORT #1

01/15/2018 – 01/15/2018

Group: sdmay18-32
Project title: Machine Learning / AI / Big Data Analytics
Client &/Advisor: Danfoss
Team Members

- Smriti Manral — Lead Test Engineer / Test Designer
- Derek Bruun — Embedded Systems Lead / Hardware Integrations
- Victoria Rasavanh — Communications Lead / Webmaster
- Brian Lindsay — Software Integrations Lead / Dev Tools Manager
- Jess Walters — Lead Architect / Tech Lead

Summary

These past few weeks has mainly been about refamiliarizing ourselves with where we left off last semester, as well as clarifying a few details on the project. Our priorities have been determined as follows: the frontend data dashboard first, and the implementation of our analytics algorithm second. We have also clarified the contents of the data dashboard.

Pending Issues

Due to the recent death at Danfoss, various bits of information and communication access has been postponed, such as access to an internal Slack (for consulting various personnel on our tech stack, changes, the algorithm, code reviews, etc.) and internal personnel (data scientist). It is also possible that the project may discard the use of Ignition, which puts a lot of our Ignition work/learning to waste.

Contributions

Name	Contribution(s) this Period	Hours this Period	Cumulative Hours
Derek Bruun	Research and prototyping of backend computations (since the frontend can't handle it), research into the compatibility transfer between our database and Danfoss's database (Oracle)	10	44.5
Brian Lindsay	Continuation of Ignition/GitHub commit tool, research into generalizing said Ignition/GitHub tool in the event that Ignition is scrapped	10	45

Smriti Manral	Currently abroad in India until the end of January, has been briefed on updates at meetings, research into base algorithm analytics	5	38.5
Victoria Rasavanh	Facilitation/Arrangement of meetings, and continuation of work on the Ignition dashboard prototype	10	44
Jess Walters	Test integration plans/design for eventual integration into Danfoss's live system, further database filtering/refactoring	10	55.5

Plans for Next Cycle

- Consult with Danfoss's newly hired data scientist
- Receive access to internal communication tools previously mentioned
- Continue adding components to the dashboard prototype (switch gears to a new technology stack if necessary)
- Dive deeper into the analytics research