sdmay18-32: Machine Learning / AI / Big Data Analytics

Week 3-4 Report

September 15 –
September29

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 of Progress this Report

* 9/11 - Onsite Meeting w/Danfoss client. Since it had been two weeks since the first meeting (as the client was overseas in China), we spent spent the first chunk of time revisiting the project scope and team expectations. After that, Kornicki brought in a software architect (Bryan Buss) to explain the details of Danfoss's existing system that we would be working with. Afterwards, we got to tour the Danfoss assembly line facilities, including the assembly line that we would be receiving data from. The main outcomes of this was a general work plan, as well as work for the team to look into various machine learning API's to try and use for the project. * 9/18 - This meeting was mainly to touch base with the client on progress from a logistical standpoint. Kornicki was wrapping up getting the approvals for the team to act as contractors, with proper access to Danfoss facilities and computers. The team brought in the paperwork needed (intellectual property agreements, confidentiality, etc.) to be signed. We also got Kornicki access to the group discord to streamline communications. * 9/28 - Smriti met up with our faculty adviser for the first time.

Pending Issues

We still need the key for accessing the contents of the assembly line data file * We are currently still waiting for our official Danfoss system access stack. This includes, official Danfoss access badges, corporate e-mail accounts, and laptops. It should be noted that we are currently unable to begin software design and testing due to corporate IT blocking our access to Danfoss systems.

Our adviser is a EE professor so there appears to be some disconnect there. She appeared to be unsure as to why she is on this project so we are unsure as to how much help she will actually be.

Plans for upcoming Period

Gain access to Danfoss IT/Hardware so we can begin algorithm design and testing. Finish administration stuff (paperwork mainly). We have a designated work-space at Danfoss so we plan to be on site each week to work on the project.

Team Member	Contribution	Weekly Hours	Total Hours

Smriti Manral	Met with adviser, relayed potential concerns with adviser	4.5	9.5
Derek Bruun	Started to discuss .NET framework, assisted with organization of legal paperwork.	4	10
Victoria Rassavanh	Organized legal paperwork, administration stuff with client	4	10.5
Brian Lindsay	Got the initial data set uploaded to GIT, began analysis.	4	9.5
Jess Walters	Assisted with data handling and analysis.	4	10