

# **EE/CprE/SE 492 BI-WEEKLY REPORT 3**

**2/23/21 – 3/1/21**

**Group number: 24**

**Project title: AI-VVO: Cloud-based Machine Learning for VOLT-VAR Control and Optimization**

**Client / Advisor: Gelli Ravikumar**

## **Team Members - Role:**

- **Abdul-Salem Adedoja - Frontend Development**
- **Ian Kegley - Frontend Development**
- **Jacob Gleason - Frontend Development**
- **Rene Chavez - Backend Development**
- **Tyler Norris - Backend Development**

## ○ **Weekly Summary**

- This week, we tested the docker containers to ensure they worked correctly and continue with beginning work with the project's front-end and back-end components. We began creating the TensorFlow environment and working with various UI components for the project. This week we also have been working through the issues with the docker containers not functioning correctly.

## ○ **Past Week Accomplishments**

- Abdul-Salam: Testing the complete docker containers and working with different UI components. Spoke with Professor Gelli about the equation to use for the AI algorithm.
- Ian: I am still working on Solving issues CORS preventing API calls when the docker container
- Jacob: This week, I worked on finalizing the docker containers for our project. For the most part, this included testing them within our project. I also started working with the frontend components to get the groundwork created and started creating a basic UI for the Entry Page that I will continue on next week.
- Rene: I have begun working on creating our TensorFlow environment inside out virtual machines. This will then hopefully transition to work along with our Tensorflow Docker image.
- Tyler:

○ **Pending Issues**

- Abdul-Salam: Minor delay due to reconfiguration of VM after sudden crash
- Ian: The docker container remains our largest issue, however, the app can be ran without the docker container and will work as intended, which means that development can still progress without it. However, it is best if we can have that working as intended as soon as possible
- Jacob: None aside for some slight complications figuring out how some of the docker containers I did not directly work on functioned
- Rene: My Docker TensorFlow image wasn't working properly as I don't believe I configured it correctly
- Tyler: None

○ **Individual Contributions**

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b> <i>(Quick list of contributions. This should be short.)</i>	<b><u>Hours this week</u></b>	<b><u>HOURS cumulative</u></b>
Abdul-Salam	Frontend groundwork and configuration	3	9
Ian	Docker debugging	4	18
Jacob	Docker container finalizations, Frontend groundwork	3	10
Rene	TensorFlow Docker Image, TensorFlow environment	3	10
Tyler	Backend Docker	3	9

○ **Plans for the Upcoming Week**

- Abdul-Salam: Work on UI for the frontend of our project
- Ian: I plan to begin developing our simulation page, and provide assistance with developing our ML algorithm
- Jacob: Continue working on creating a basic UI for the Entry Page for the frontend of our project
- Rene:
- Tyler: Work on backend Docker related tasks

- **Summary of Weekly Advisor Meeting(s)**

- Went over some issues with the docker container, laid out plans to start turning our focus to the development of the main algorithm and dashboard