

# EE/CprE/SE 491 Biweekly Report 2

**Sept 17 - Sept 27**

**Group Number:** Sddec22-14

**Project Title:** Machine Learning for Human Biometrics

**Client:** JR Spidell (Collins Aerospace)

**Advisor:** Akhilesh Tyagi

## **Team Members/Role:**

- Ron Mei Hang Teoh - Database Manager
- Yee Shen Teoh - Hardware Manager
- Zi-Jan Wong - ML Manager
- Nathanael Morris - ML Manager
- Ritvik Maripally - Security Manager

## **Weekly Summary**

Our team met together and planned our presentation slides, as well as rehearsed for our PIRM presentation. We also had discussions on how to move forward with our project during the semester, what goals we had, and how we will reach them. We have gotten some pretty informative feedback from our fellow coursemates, one of which is to include implementing HIPAA on our design. We will be sure to look into all the feedback and improve our project accordingly.

## **Past week accomplishments**

Ron - Talked to our client about some technical issues that I'm facing, and he pointed me towards some online resources and GitHub repositories, so that is what I'm going to do for the upcoming week. Set a near term goal with the client as well.

Jan - Still working on the error calculation algorithm, working on a way to compare with real data.

Yee Shen - There were some issues with downloading items to the Ultra96. I researched online and tried some solutions but they all failed. I have talked with our client about the issues and we are working on a solution currently. Also, I spend some time with the team to work on the PIRM presentation.

Ritvik - Prepping ideas with database and setting up MFA. Working on scenarios for presentation and making sure we follow through with HIPAA

Nathanael - Worked on reading the code for the ReMoDNaV algorithm to understand what the parameters do. Then I thought about what parameters should be changed to lower the error and improve the accuracy of the algorithm.

**Pending issues**

- N/A

**Individual contributions**

NAME	Individual Contributions	Hours this 2-week	HOURS cumulative
Ron Mei Hang Teoh	<ul style="list-style-type: none"><li>- Talked to client about current technical issues.</li><li>- Read up on some online resources that the client provided.</li><li>- Set short team goals with client.</li></ul>	12	24
Yee Shen Teoh	<ul style="list-style-type: none"><li>- Downloading application to Ultra96.</li><li>- Talked with client regarding error and finding solution for the problem.</li><li>- Worked on PIRM presentation.</li></ul>	12	24
Zi-Jan Wong	<ul style="list-style-type: none"><li>- Worked on some parts of the error calculation algorithm</li></ul>	12	24
Nathanael Morris	<ul style="list-style-type: none"><li>- Read the code to the ReModNaV algorithm to understand how the parameters are being used</li></ul>	12	24
Ritvik Maripally	<ul style="list-style-type: none"><li>- Make scenarios with PKM methods</li><li>- Working with HIPAA Regulations</li></ul>	12	24

**Comments and extended discussion**

- N/A

**Plans for the upcoming week**

Ron - Read up on the remaining resources that the client sent, and have a quick discussion with the client on the findings.

Keep working towards the short term goals that were being set.

Jan - Continue implementing the algorithm to only calculate the error that matters.

Yee Shen - Try using the solution provided by our client to download the necessary applications on ultra96. Planning to also try using a webcam with the ultra96 and figure out how to make it display the video captured on the monitor.

Ritvik - Make testing in vmware with security methods.

Nathanael - Continue working on the algorithm and working with different parameters lower the error. Also try implementing the algorithm in a linux environment

### **Summary of weekly advisor meeting**

- We do not have weekly meeting with our advisor for the past two weeks. We did however provide updates for our project by emailing our advisor with our individuals updates for the week.