

EE/CprE/SE 491 WEEKLY REPORT XY

3/28/22 – 4/3/22

Group number: sddec22-14

Project title: Machine Learning for Human Biometrics

Client &/Advisor: JR Spidell & Akhilesh Tyagi

Team Members/Role:

Ritvik Maripally: Security Manager

Ron Mei Hang Teoh: Database Manager

Yee Shen Teoh: Hardware Manager

Zi-Jan Wong: Machine Learning Manager

Nathanael Morris: Machine Learning Manager

○ **Weekly Summary**

Mainly figuring out what are the requirements for each part of the system. We plan to run each part of the system to identify certain requirements such as speed, latency, etc.

○ **Past week accomplishments**

Yee Shen Teoh: Looking at projects in Hackster.io and trying to find information about how to play video from Ultra96. Besides that, made a slides about requirements for DDR in Ultra96.

Ron Mei Hang Teoh: Installed Anaconda, slightly updated the database use case profile

Zi-Jan Wong: Tried running the code in Jupyter Notebook, but failed to open files due to different paths, so trying to fix it. Play around with the code to see where can we improve the accuracy on. Tried to add a chunk to calculate average errors from the output with root means squared error.

Ritvik Maripally: Isolation methods and understanding how to work around zynq

Nathanael Morris: Came up with requirements for the REMoDNaV eye movement classification algorithm.

○ **Pending issues**

Yee Shen Teoh: N/A

Ron Mei Hang Teoh: N/A

Zi-Jan Wong: N/A

Ritvik Maripally: N/A

Nathanael Morris: N/A

○ **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Ritvik Maripally	More risk assessments on the project, laying out potential scenarios in our project to implement specific security measures	6	48
Ron Mei Hang Teoh	Installed Anaconda, updated the database use case profile	6	48
Yee Shen Teoh	Searched projects on Hackster.io for solutions. Prepare a set of requirements for DDR in Ultra96.	6	48
Zi-Jan Wong	Fix paths to open dataset, try adding a function to calculate average error	6	48
Nathanael Morris	Brainstormed requirements for eye movement classification component	6	48

○ **Comments and extended discussion**

N/A

○ **Plans for the upcoming week**

Yee Shen Teoh: Continue getting familiar with Ultra96 and get used to its environment by going through example projects in Hackster.io. Try to work on some of the projects.

Ron Mei Hang Teoh: Install Jupyter notebook, try to perform read and write operations to an influx database within the Jupyter notebook environment

Zi-Jan Wong: Continue working on the function to calculate average error to better justify the numbers we get.

Ritvik Maripally: Finish all the scenarios and bring back findings on what to do when and present to team. Start on initial database security(software)

Nathanael Morris: Continue working on requirements and figuring out how to meet each of them for the REMoDNaV eye classification algorithm.

○ **Summary of weekly advisor meeting**

N/A