
sdmay19-04: Open-Source Prototyping of 5G Wireless Systems for Smart Ag, Autonomous Veh

Week 11 Report

January 21 - February 1

Team Members

Anthony Benson — *Chief Engineer: OAI Simulations*

Hye-Sung Moon — *Chief Engineer: Hardware Systems/SUMO Simulations, Client/Adviser Liaison*

Jaime Zetina — *Engineer: Hardware Systems Testing, Report Manager*

Jared Gorton — *Engineer: Software Systems Testing*

Khanh Luu — *Chief Engineer: SUMO Simulations, Client/Adviser Liaison*

Ted Miller — *Engineer: Software Systems Testing, Meeting Scribe*

Summary of Progress this Report

- We have had our first meeting 1/24/19. We have established individual responsibilities for the team.
 - We are moving forward with two sections within the team. Group consisting of Ted, Khanh, Jared, and Anthony will be working on OAI reference code to gain knowledge on how to manipulate the code so we may make changes to the code in the future. Group consisting of Jaime and Hye-Sung will work on making the SUMO software ready for integration within OAI and the CPS algorithm to be derived.
 - We have had our first meeting with our adviser 1/24/19, in this meeting we have gained new resources to work with. We have had an example of OAI code that could be helpful moving forward. This code will serve as a reference for our work.
 - Our second meeting 1/31/19 we discussed some of the technical difficulties we started to encounter.
 - We have now discovered an issue of having a version of Ubuntu that is not completely compatible with the OAI software. We began to run the built-in simulation of the base station (ENB) and one user equipment (UE). The version of Ubuntu was missing some of the key Cmake files that support the OAI simulations.
 - We have submitted request to make the appropriate changes to our server provided by ETG from version 16.04.5 to version 16.04.2.
 - We have met with our adviser 1/31/19. We notified our adviser that we did not make significant progress to update him with. We notified of our team discussion and plans moving forward. He agrees with our plan but stress the importance of time management. He has also suggested we keep good notes and records of our progress as this project might be worth to submit a paper of our findings to IEEE for publication.
-

Pending Issues

- Our sever will be ready early next week courtesy of ETG.
 - Installation of OAI into the Ubuntu version 16.04.2
 - CPS algorithm
 - OAI reference code
 - Ames amp in SUMO
-

Plans for Upcoming Reporting Period

- Have OAI operating within our server and begin to implement SUMO
- Make progress with the OAI reference code
- Make Progress with CPS algorithm

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Anthony Benson	Engineer: Software Systems Testing, Meeting Scribe	7	74
Hye-Sung Moon	Reinstalled the OAI and check the functionality of OAI. Reading the materials regarding to the project. Preparing for writing a paper.	8	136
Jaime Zetina	verified simulation of OIA within our server. working with SUMO to establish a working map area. familiarizing self with IEEE publication standards.	6	128
Jared Gorton	Attended group meetings and adviser meetings and worked with Hye-sung to verify OAI operations on the server.	6	83
Khanh Luu	Meeting with advisers for plan in this semester Meeting with group to discuss our upcoming steps. Setting up ECE server but fails. Reading OAI codes for next implementing steps.	10	86
Ted Miller	Met with adviser twice also met with the group twice. Also started to look at the OAI code for things that need to be edited.	10	

Gitlab Activity Summary

Nothing to report.