

sdmay19-04: Open-Source Prototyping of 5G Wireless Systems for Smart Ag, Autonomous Veh
Week 5 Report
October 6 - October 12

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/Advisor Liaison*

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

Summary of Progress this Report

- 1) We resolved the previous issues with the installation of the supporting software for OAI.
 - a. We have done this by installing the VM in our laptops. We have done this by installing Virtual Box (VB) a VM open source software.
 - 2) We created the VM and installed a Linux operating system, the Linux Operating system is required to support Ubuntu 14.04.3 with the low latency Kernel 3.19.
 - 3) We have made began to install SUMO in Ubuntu.
 - 4) We have worked with Yuwie Xie to finish installing the OAI and begin running the program. We are continuing to research OAI and its implementation.
 - 5) We don't believe we need a VM from ETG at this moment.
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Pending Issues

- 1) We must continue to work with the OAI software to be able to add-on our algorithm that will be designed.
 - 2) Begin to integrate SUMO simulation with OAI.
 - 3) Further understanding of LTE, PRKS, UCS, and CPS.
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Plans for Upcoming Reporting Period

- 1) Have OAI running basic functions.
 - 2) Have SUMO running basic functions.
 - 3) Continue to work with the OAI.
 - 4) Begin to simulate OAI and SUMO.
 - 5) Begin to derive an algorithm.
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Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Anthony Benson	Anthony has coordinated with Yuwei Xie for guidance using OAI. Installed Ubuntu and has begun trying to run OAI.	8	42
Hye-Sung	Installed SUMO on Ubuntu 14.04, and successfully ran the program. Installed directory, files and required sources on Ubuntu for importing Ames map. Postponed importing map till OAI is installed over Ubuntu. Continued to research the area of hardware implementation given software simulations. He has also researched SUMO software to make the connection between OAI and SUMO.	9	58
Jaime Zetina	Installed the VM on laptop and installed Ubuntu with the required kernel. Had success in installing SUMO into Ubuntu and began trying to run the software. Has continued to read PRKS, UCS, and CPS and has built progress reports for the team.	10	55
Jared Gorton	Has installed Ubuntu and began trying to run OAI software.	9	38
Khanh Luu	Has Researched OAI on Ubuntu, and Installed Ubuntu. Has asked for help from the PhD student with the OAI installation. Read UCS, CPS, and RPK papers.	8	36
Ted Miller	Has been helping identify software issues in the installations. Ted has facilitated meeting times, maintained meeting minutes, and has maintained record of important discussion topics in team meetings.	9	56

Gitlab Activity Summary

Nothing to report.
