

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

Week 16 Report

March 2 - March 8

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 had our weekly meeting.
 - o The OAI team is continuing to work with OAI for the integration of the new GCS Algorithm.
 - ☞ They have begun to modify OAI code. The newest version of OAI has presented some issues but we are moving forward with this version and will make effort to solve issues.
 - o We discussed the implementation of the algorithm as a frame for geometrically and position prediction.
 - ☞ During our meeting we discussed mathematical manipulation of sumo data to fit into OAI.
 - o SUMO vehicle data is ready for use in OAI.
 - o The OAI team is working of the integration of SUMO data into OAI
- We did not meet with our adviser this week due to previous engagements.

Pending Issues

- ☞ Manipulation OAI source code.
- ☞ New GCS algorithm design.
- ☞ SUMO integration into OAI for mobile dynamic data.

Plans for Upcoming Reporting Period

- ☞ Design new GCS algorithm.
- ☞ Integrate SUMO into OAI.
- ☞ Find the location where to integrate the new GCS algorithm into OAI.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Anthony Benson	Met with OAI group Tuesday. Worked on implementing solution for predicting location and acceleration status for vehicle in next time step. Began implementing TCP connection between OAI and SUMO. - Using	12	126

	latest version of OAI. - Editing WebSocket in openair2/Layer2/MAC - Record and edit needed values in mac.h: lat, long, velocity... for later use - OAI group meeting - Group meeting - Adviser meeting		
Hye-Sung Moon	Continued to work with sumo to make necessary changes in the map parameters and the data to be extracted.	13	204
Jaime Zetina	Continued to work Hye-Sung in effort to modify sumo files to make necessary changes in the map parameters and the data to be extracted.	13	188
Jared Gorton	Met with OAI group Tuesday. Worked on implementing solution for predicting location and acceleration status for vehicle in next time step. Began implementing TCP connection between OAI and SUMO. - Using latest version of OAI. - Editing WebSocket in openair2/Layer2/MAC - Record and edit needed values in mac.h: lat, long, velocity... for later use - OAI group meeting - Group meeting - Adviser meeting	12	127
Khanh Luu	Met with OAI group Tuesday. Worked on implementing solution for predicting location and acceleration status for vehicle in next time step. Began implementing TCP connection between OAI and SUMO. - Using latest version of OAI. - Editing WebSocket in openair2/Layer2/MAC - Record and edit needed values in mac.h: lat, long, velocity... for later use - OAI group meeting - Group meeting - Adviser meeting	14	138
Ted Miller	Met with OAI group Tuesday. Worked on implementing solution for predicting location and acceleration status for vehicle in next time step. Began implementing TCP connection between OAI and SUMO. - Using latest version of OAI. - Editing WebSocket in openair2/Layer2/MAC - Record and edit needed values in mac.h: lat, long, velocity... for later use - OAI group meeting - Group meeting - Adviser meeting	14	

Gitlab Activity Summary

Nothing to report.
