sdmay19-04: Open-Source Prototyping of 5G Wireless Systems for Smart Ag, Autonomous Veh
Week 3 Report
September 13 - September 24

Team Members
Anthony Benson — *software engineer*
Hye-Sung Moon — *client/adviser liaison*
Jaime Zetina — *report manager*
Jared Gorton — *software engineer*
Khanh Luu — *client/advisor liaison*
Ted Miller — *meeting scribe*

Summary of Progress this Report
1) In addition to breaking down chapter readings we have been broken down into two subgroups (team freedom, team Independence) to complete tasks in parallel.
   a. We have assigned team freedom to read most of the textbook and present a summary to the rest of the group for an overview of the material.
   b. We have assigned team Independence to gain a basic understanding of OAI to give an overview of the software to the team.
2) We have completed an outline for our road map and placed milestones.
   a. Our milestones have been discussed with our adviser and our client. They have been accepted as very optimistic, challenging, and ambitious.
3) We have presented and discussed in our ideas with our client and adviser.
   a. We have decided to pursue the Autonomous Vehicle application.
   b. Our professor has emailed us the articles mentioned last week.
   c. We have provided our adviser/client with a list of concerns the group have regarding the feasibility of the project and addressed the deliverables of the project. We have a better understanding of the project goals but still lack much of the knowledge required to complete the project. We will strive to derive a system or algorithm within OAI to allow V2V communication with predictable reliability and test in within SUMO simulation.
4) During our meetings we have presented summaries of chapters 3–11 of the textbook.
5) We have made initial attempts to use OIA, and SUMO.
   a. We were unsuccessful in the installation of the two software's
      i. They will require addition operating systems that we currently do not have (Ubuntu).
      ii. In addition, we will need to setup special kernels, power regulations, and other settings we are not familiar with yet.
   b. We will have to continue to research and explore OAI, it will require further analysis to determine how to install and use.
   c. SUMO will require the same attention and effort to install.

Pending Issues
1) OAI installation
2) SUMO installation
3) Researching; LTE, UCS, CPS, and PRKS.

Plans for Upcoming Reporting Period
1) During meeting discuss the possibility of seeking help for our adviser's PhD student, Yuwei.
2) Present assigned chapters of the textbook to the team.
3) Gain more knowledge of OAI to install OAI.
4) Gain more knowledge of SUMO to install SUMO.
5) Read new material sent to us.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Anthony Benson	Read and summarized chapter 9 of LTE/5G book Researched OAI requirements	6	22
Hye-Sung Moon	Summarize the LTE-5G textbook chapter 11. Began to research SUMO will need further research to be able to install and use.	10	34
Jaime Zetina	Attended group meetings and participated in discussions during our group meeting with the adviser. We assigned reading to team members. Summarized and presented chapter ten of the text book. Met with Khanh to discuss how we will install OAI. We found we will need to do further research for supporting software and supporting operating systems. We are unsure if our laptops will have the capability to support requirements for the software, so we may enquire what kind of support we can get from ETG.	13	32
Jared Gorton	Read Chapter 5 of the LTE book	5	20
Khanh Luu	Decide team role. Researching LTE and OAI.	7	18
Ted Miller	Had several meetings as a group and with the adviser. Talked about the necessary knowledge for the project and broke the textbook into sections. Read chapters 7 and 8 of the textbook. Created slides over the two	15	35

	chapters that I read and presented them to the rest of the group.		

Gitlab Activity Summary
Nothing to report.