sdmay23-14: Mobile Vehicle Cybersecurity Using a Secure Bridge

Week 1 Report August 22 - September 30

Team Members

Ryan Campbell — Member Levi Jansen — Member Riley Lawson — Member Drake Ridgeway — Member Ryan Scehovic — Member Cody Stricker — Member Josue Torres — Member

Summary of Progress this Report

During this period, we have met with our advisor twice. The first meeting was to talk about the basics of the CAN network in a mobile vehicle, the J1939 standard, and basic cryptography. The second meeting was more of a follow up to the first meeting to clarify any gray areas we were confused about and to further introduce cryptography. Furthermore, outside of meeting with our client, we have also read and reviewed many videos related to the project that our client shared with us regarding CAN networks, J1939, and mobile vehicle hacking. In relation to the class assignments, we have also completed our User Needs document as specified by class expectations.

Pending Issues

None yet as we haven't been implementing anything technical as of yet.

Plans for Upcoming Reporting Period

What we plan to do from here forward is to start researching different crypto libraries that we could use in python for our project. Next Monday in the afternoon we are meeting with our client so he can demonstrate exactly how Socket CAN works, as well as demonstrating an attack on the network for us so we can see exactly how it's done.

Team Member	Contribution	Weekly Hours	Total Hours
Ryan Campbell	User Needs, Reading	10	0
Levi Jansen	User Needs, Reading	10	0
Riley Lawson	User Needs, Reading	10	0
Drake Ridgeway	User Needs, Reading	10	
Ryan Scehovic	User Needs, Reading	10	
Cody Stricker	User Needs, Reading	10	

Individual Contributions

Josue Torres	User Needs, Reading	10	

Gitlab Activity Summary

Nothing to report.