

sdmay23-15: Mobile Vehicle Cybersecurity with On-board Key Management

Week 2 Report

October 3 - October 7

Team MembersBaganesra Bhaskaran — *Git Administrator*Chau Wei Lim — *Strategist*Alex Freiberg — *Client Liason*Brian Goode — *Team Organizer*Michael Roling — *Documenter*Aayush Chanda — *Advisor Liaison***Summary of Progress this Report**

- We were able to have a virtual meeting with the client and a small demonstration on live attack on CAN bus communication was done by client. The demonstration gave an insight on which path we should be taking in designing the implementation and concept of our project.
- We were able to propose few ideas as an outcome from our readings of research papers.

Pending Issues

- We need a setup of virtual machines to use and get familiar with the tools used in the demonstration
- We need to feed the CAN communication file that the client provided as a sample into the virtual machine.

Plans for Upcoming Reporting Period

- Setup a virtual machine and download tools needed for the CAN communication
- Start git repository to have a version control for the project.

Individual Contributions

| Team Member | Contribution | Weekly Hours | Total Hours |
|---------------------|--|--------------|-------------|
| Baganesra Bhaskaran | - Worked on reading research papers and suggesting concepts to be proposed to the clients. Getting the git repository startup and have the team website to be updated regularly. | 3.5 | 0 |
| Chau Wei Lim | - I worked on searching papers related to our project so that I have better understanding on what can we start off on the project. | 3.5 | 0 |
| Alex Freiberg | - Key Management Research for J1939 in practice in industry today. In-progress: setting | 3.5 | |

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| | up VM with CAN bus simulation. | | |
| Brian Goode | Contributing to team documents, researching J1939, cryptographic technologies to apply to our project with the CAN bus and ECUs. | 2.5 | 0 |
| Michael Roling | Collected a series of research documents to facilitate an understanding for key management on the CAN Bus; will be discussing these options with our client next week. | 3.5 | |
| Aayush Chanda | Worked on the team organization. | 3 | 0 |
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Gitlab Activity SummaryNothing to report.
