SIP-adus Workshop 2019

Cybersecurity

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Introduction

Our session will report the latest status of cybersecurity activity for

“automated driving and connected vehicle”

by the experts of each fields internationally.

Surroundings #1

Hackers have been less-interested in Cyber-attacks on vehicles, compared to attacks on Military secrets, Banking system and other social infrastructure systems.

Because,
the public attention was not so high so far.

Surroundings #2

And also
it's not easy to obtain the vehicle-relevant information through internet.

This means it takes time and more effort to attack vehicles for Hackers.
That's why

Hackers have not been aggressive for attacking vehicles so far.

Surroundings #3

Recently, the introduction of automated driving and connected functions into the market has become a Hot Topic.

Then the public attention to Cyber-attack on vehicle is getting higher.

Vehicle attacking is becoming a good stage to show off for Hackers

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Surroundings #4

Watching at “Blackhat and DEFCON” over the past three years,
Hackers deepened their understandings of in-vehicle systems and accumulated the Know-Hows for attacking vehicles.

This situation can be said

It’s no wonder to be attacked anytime.

Things to do now

Assuming the Automated driving vehicle must be attacked, OEMs have to prepare for it.

The situation in which the Attacks cannot be detected until the actual damage has occurred should be avoided.

Things to do now

Now, OEMs are only preparing in passive means like MAC : Message Authentification Code for their attacks. But It's not enough.

OEMs need to detect when a hacker's attack comes in immediately for the next action

Discussion

IDS : Intrusion Detecting System seems to be the minimum necessary countermeasures to be prepared for the unknown attacks from Hackers without worrying about false detection.

(important point to be discussed)

Discussion

Today, together
We'd like to think about
What the automotive industry
should prepare for
the hacker's unknown attacks
focusing on IDS.


Let me start our session