

### IVDS Summer 22 – Session 1 Outbrief



# Talk 1: Christoph Schmittner ATI, AT <u>Automotive Cyber-Security – from standards to regulations</u>

- Vehicular security
- Regulations (mandatory) vs.standards (not mandatory)
- Global view of automotive Cybersecurity (CS) regulations interesting world map
- UN R155 CS and CS management system (CSMS)
- CSMS from R155 to ISO/SAE 21434 and ISO PAS 5112
- Divide between experts in security, experts in automotive
- Vehicle type cybersecurity
- **ISO/SAE 8475** 
  - Cybersecurity Assurance Levels (CAL) and Target Attack Feasibility (TAF)
- CS of items does not imply CS of architecture
- Several enjoyable Charllie Ciso cartoons



UN R155 CYBER SECURITY AND BER SECURITY MANAGEMENT SYSTEM



Law Regulation Standard ISO/SAE 21434

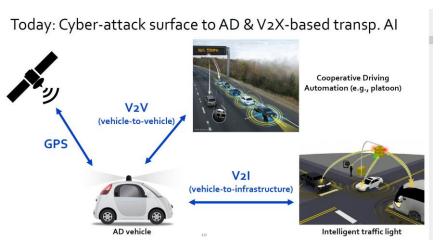


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# Talk 2: Qi Alfred Chen, UC Irvine, US <u>Cyber-Attacks Against Al Stack in Autonomous Driving and Intelligent</u> <u>Transportation</u>

- Al stack: Brain for AD
- Cyber attack on AD (automous driving) and V2X





- First automatic vulnerability discovery methodin CV protocols using model checking
- Results



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#### **Discussion**

Balanced well between the two talks

- Questions concerning
- Model checking
- Need for analysis by engineers to support statndards
- Cybersecurity and Safety To what extent dependent?

This was questioned and discussed more than other topics



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