Hack The Automotive Simulator

Setting up a simulation environment for carrying out hacking attacks on CAN bus systems

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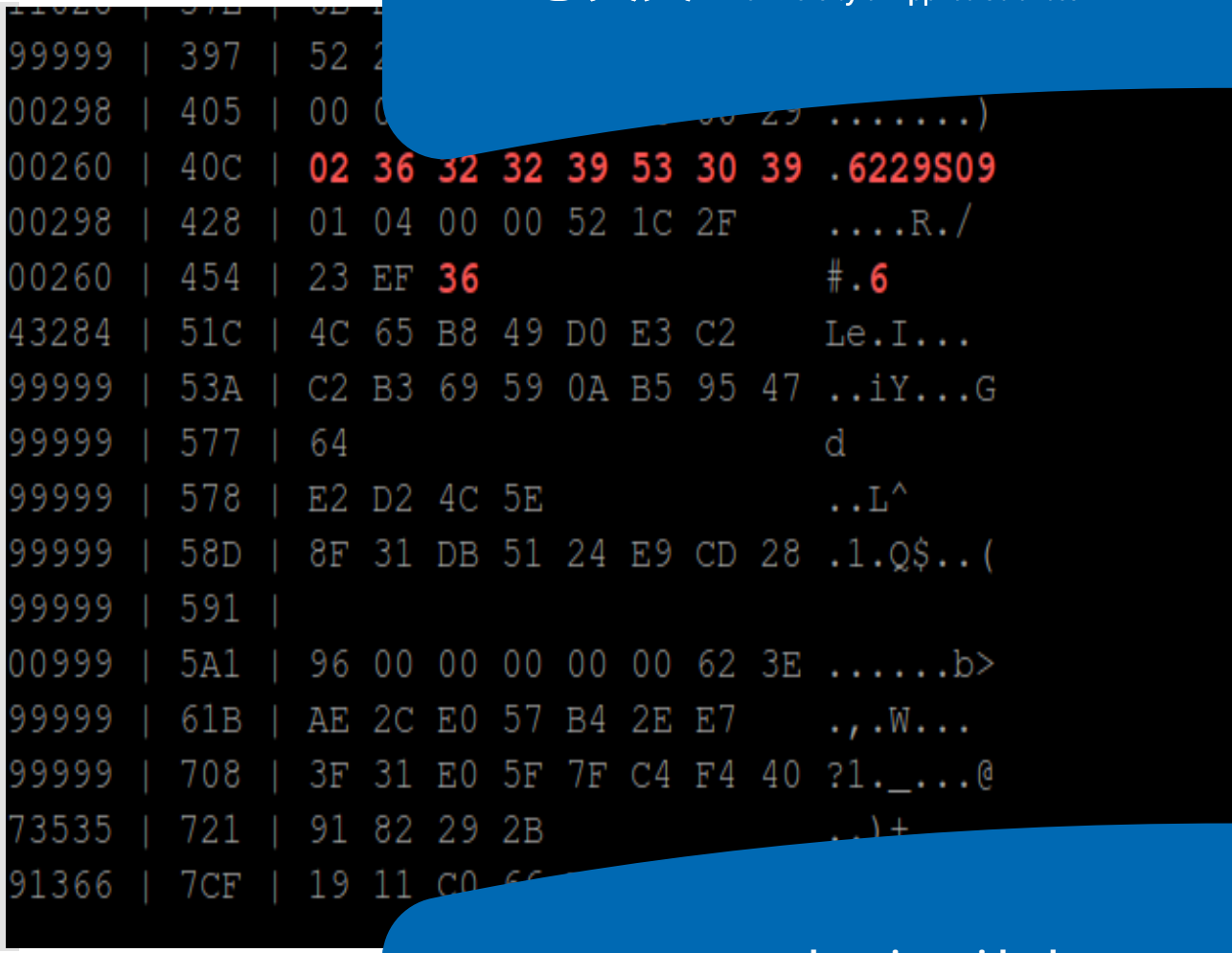

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Agenda

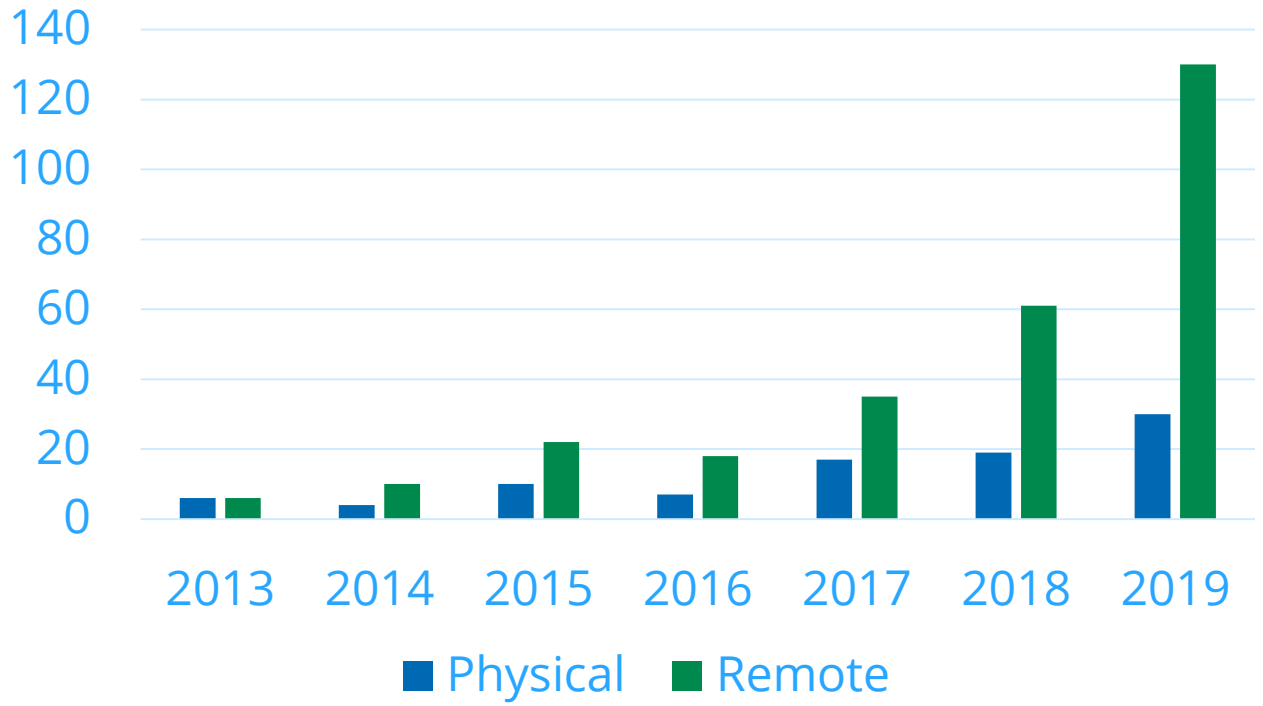
1. Motivation of this paper
2. Tools for our demonstrator
3. Live demo of the simulation environment

Motivation of this paper

Hack The Automotive Simulator

Motivation of this paper

- Remote attacks are increasing significantly.
- Authorities and companies often lack the understanding to be able to carry out forensic examinations on vehicles.



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Tools for the demonstrator

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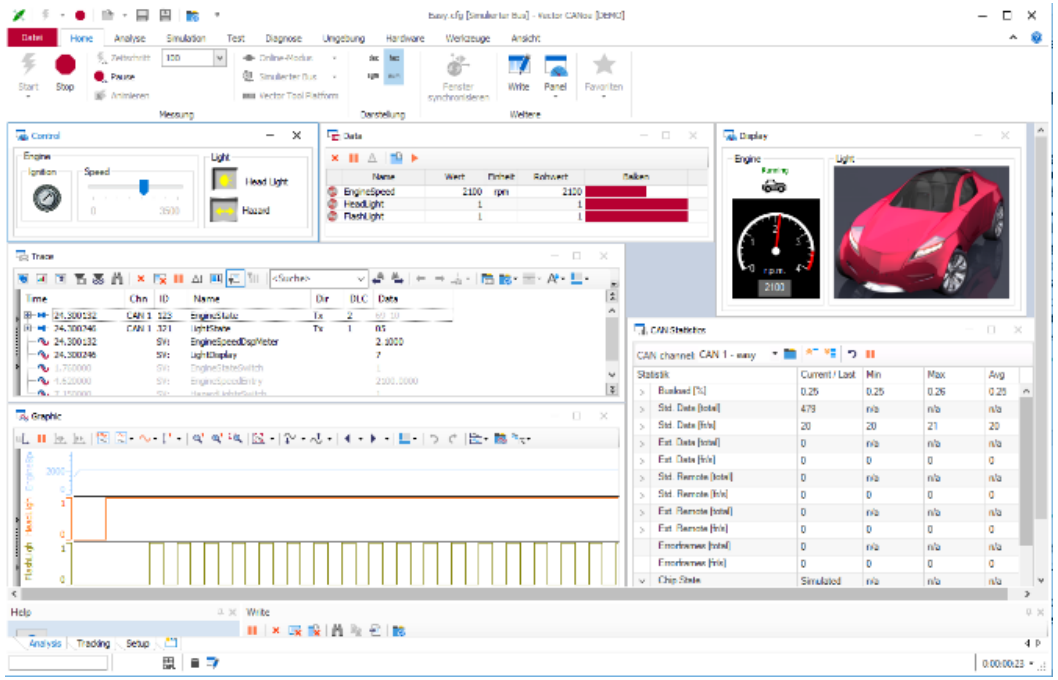
Tools for the demonstrator

We use the software tools:

- Vector CANoe
- CANUTILS
- Microchip Studio
- Red Pitaya System
- AnyDesk oder UVNC
- ICSIM



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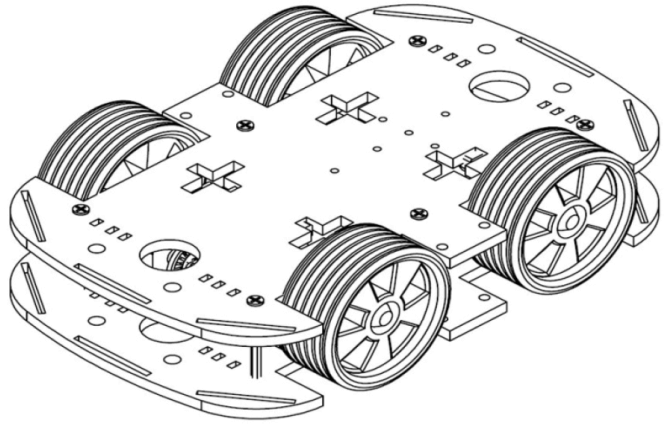
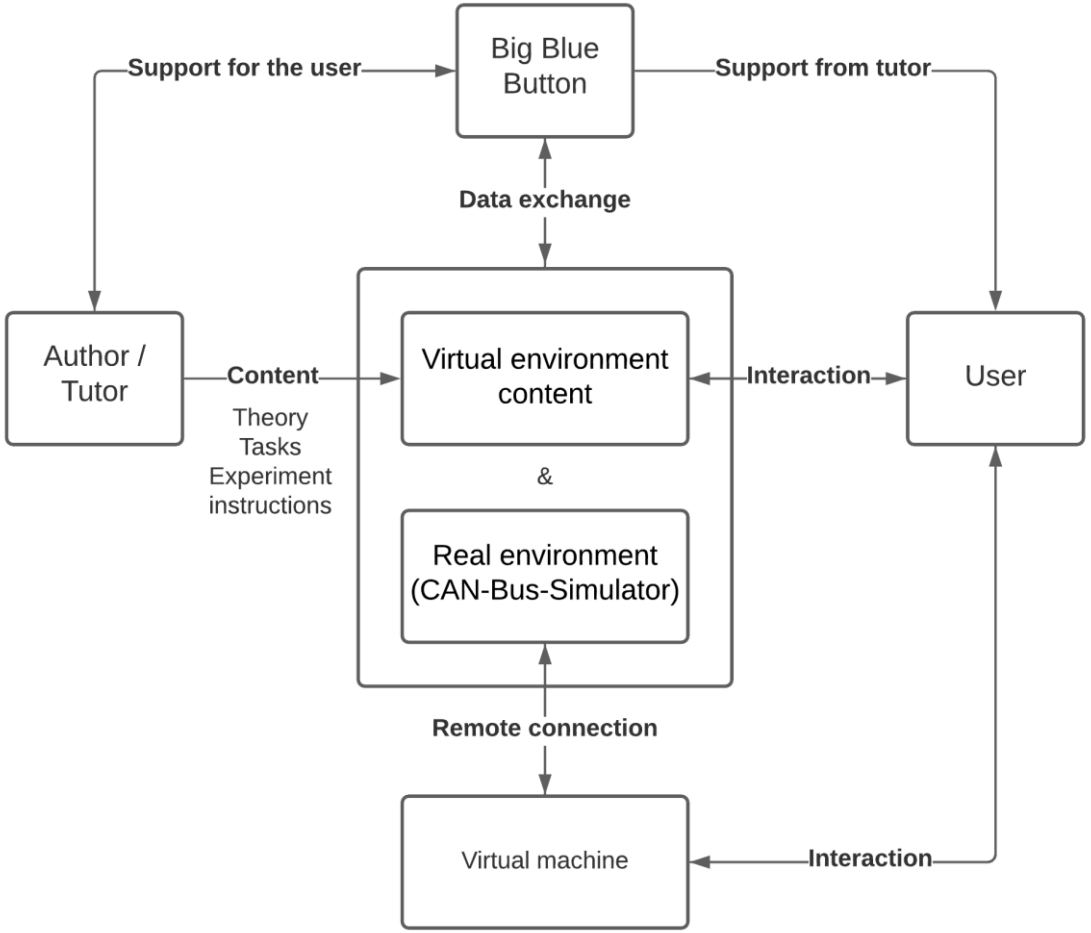
Tools for the demonstrator

Hardware used:

- PCAN-USB
- Robot Car Kit from Joy-IT
  - EVAL6207N evaluation board from STMicroelectronics
  - AT90CAN128 development board
  - ESP32-EVB Development Board with WIFI and CAN



Structure of the simulation environment



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Live demo of the simulation environment

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Thank you very much for your attention.

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