Virtual Testing in ADAS

What is the future of testing for AD, specially for levels 3 to 5, in regard to simulations?
WHY use simulations in ADAS
WHY?

Safety of the testing process
WHY?

Collision mitigation involving humans
Collision mitigation involving humans
WHY?

Flexibility and easiness to build test scenarios
WHY?

Cost
WHY?

Cost
WHY?

Control over sensor information
Sensor

Controller

Vehicle / Actuators

Objects

Decision

SIMULATION
WHY?

Fun
HOW?

Implementation
National Instruments Hardware

NVidia GPU

AD Controller
National Instruments components

- FPGA + FlexRIO to control ECU interfaces (simulate camera and ultrasonic sensors)
- FlexRay hardware for vehicle communication
- MXI interface for NVidia GPU
- LabVIEW as a software environment

NVidia GPU

- Generate and deliver sensor data in real time
Download and Login to the NIWeek Mobile App

VIEW WEEKLY SCHEDULE

FIND YOUR SESSION

BUILD YOUR SCHEDULE

More Information at ni.com/niweek
Before you go, take the survey.
Stay Connected During and After NIWeek

ni.com/niweekcommunity
facebook.com/NationalInstruments
twitter.com/niglobal
youtube.com/nationalinstruments