AUTONOMOUS VEHICLES SUMMIT

SLOVAKIA

AUTONOMOUS VEHICLES SUMMIT

30-31.05.2019

Crowne Plaza Bratislava

Preliminary program topics focusing

- Summit keywords

CONFERENCES (1- ...)

ROUND TABLES of conferences (Panel discussions)

B2match networking

STARTUP STAGE

ROUND TABLES of Startups EXPO

PART OF AVs SUMMIT

DAY 1

Introduction : The 6 levels of autonomy

Level 0—No Automation
Level 1—Driver Assistance
Level 2—Partial Automation
Level 3—Conditional Automation
Level 4—High Automation
Level 5—Full Automation

Automation and mechatronic system related technologies for Connected and Fully automated AVs

Part 1 Navigation, localization, driving, communication systems HMI

Autonomous system SW and HW / Autonomous vehicle hardware and software technologies

ICT Applications for autonomous vehicles

Self-driving Technology

Mechanical KERS (Kinetic Energy Recover System)

Teleoperation technologies communication (remote technologies)

Human Machine Interface–voice communication interface (Voice Recognition Technology)

Navigation and Communication Systems and technologies for Autonomous Vehicles

Cloud technologies in Automotive processes

Part 2 Part 2 Sensors systems and components for AVs

Complex Network Control systems of autonomous vehicles

Sensor Components , Cameras as primary sensors , Radar Sensors , Lidar Sensor

Autonomous Vehicles : Cameras or LIDAR system ?

Tesla vs UBER vs Google (Waymo) systems Video Cameras

Part 3 Accellerators of innovations - Connected and AVs context of Automotive industry

Industry 4.0 - Cyber Physical systems – Automotive Industry

Internet of things, Industrial Internet of things in Automotive Production

Artificial Intelligence in Automotive industry

Cloud technologies in Automotive processes

Big Data in Automotive processes

Robotics and mechatronics on vehicles Collaborative Robotic in Process Automation (RPA)

Can be self-driving vehicles created with 3D printing technology ?

Part 4 Technology for connected vehicles

C2C systems (car to car)

C2I systems (car to infrastructure)

Seemles communication systems for connected vehicles

fleet car management

AVs Safety and Testing

Safety Control Systems for Autonomous Vehicle Traffic testing results

Public road testing in Europe Public road testing in Slovakia

Baidu launches public road tests of autonomous cars in China

Autonomous Vehicles legislation

How will elf-driving cars affect the law?

Testing legislation Standards for autonomous vehicles

Autonomous Vehicles Applications

Part 1 AVs in transportation

AVs: Transportation goes to transformation I. (traffic flow, public transport, logistics)

Autonomous vehicles and traffic flow

Will autonomous Vehicles Change Public Transportation ?

Influence of Autonomous Vehicles on Logistics

AVs:Transportation goes to transformation II. (aircrafts, helicopters, navitime, maritime, hyperloop, skyway)

Mostly-autonomous commercial aircraft pilot systems

Driveless air vehicles – drivelesspassengersdrons

Self driving Helicopters industry

Navitime automation

Maritime robotics

Hyperloop

Skyway

AVs : Transportation goes to transformation III. shared AVs , incl. cars)

Shared Autonomous Vehicles

Car-sharing and reduced vehicle ownership

Part 2 AVs in key – Industries of the country

AV s by search and rescue, mapping, fisheries, agriculture, forestry, natural resource monitoring, fire fighting and emergency management, airborne communication collection and relay, weather data collection, environmental monitoring, pollution detection

AV s by infrastructures (pipelines, power lines, railways, waterways, roads, airports

AV s Aviation
Unmanned Aerial Vehicles (UAVs) for security purposes , including border patrol, anti-drug warfare, chemical, biological and radiological detection, maritime vessel identification and interdiction

AV s R+ D in Defence / Weapons industry . AVs / Self-driving cars will safe lifes in army defence industry

AV s Robots

AV s in mining

Part 3 AVs in Public Health

Autonomous navigation in mobile robotics and its application in a hospital environment

Relationship between technological innovations in transportation and public health

How will the latest developments in the car industry help healthcare? Autonomous driving services could radically disrupt the healthcare market

The mobility of the young, the elderly, and the disabled will be increased

Call for Public health research agenda in AV s context

The future of AV s transportation policy in public health

Autonomous Vehicles impact

Part 1 Impact on Automotive industry in Slovakia and in V4 countries

New system of ecosystems in Automotive Industry

Convergence of automotive and technology partnerships in Automotive industry : New system of ecosystems in Automotive Industry by AVs manufacturing (car manufacturers and automotive suppliers OEM - technology systems partnerships, carmakers with car-sharing companies, with universities, with academy, with government, with investors, with complete business line , incl. Marketing, sales and supply chains)

Product innovation collaborative platform by automotive manufacturers

Impact on Automotive Industry in Slovakia

Impact on Major component suppliers (OEM) in Slovakia

The impact of aging on motoring

New opportunities for after-sales service and customer

service

Part 2 Impact On cities/Smart Cities and regions

Autonomous Vehicles on streets of towns
Shared Autonomous Vehicles
Autonomous vehicles and traffic flow

Traffic engineering changes

Fewer vehicle crashes and accidents without driver errors Traffic

flow could be more efficient and congestion decreased

Space used for parking (could be repurposed because such vehicles won't need proximate urban parking)

Drink-driving in drivelesscar ?

Vision : The Day after (implementation of AVs to the town)

Part 3 Shared Autonomous Vehicles - new circular economy

UBER ,Taxify , and the others

Part 4 Environmental Impact of Autonomous Vehicles

Environmental benefits of driverless cars

Emmisson

Lower energy consumption

Reducing number of cars on the road

Fewer cars per household-Fewer parking places

Less road accidents by autopilot

Part 5 Impact on society and economy of the country

Large effect of Autonomous cars on our way of living

Impact on consumers and companies

The impact of AV on the quality of life, for example,

people with severe health disabilities

Infotainment - how to spend time in AV

Self-driving cars could have negative influence on insurance industry. How?

Self-driving cars will influence the Real Estate

Progress of EV , AVs and industry of Mobility as Service (MaaS)

AVs : More jobs ? Mobility services will go up
The costs of travel time and congestion will be lower - vehicle travelers will spend their travel time engaged in other activities

Fuel efficiency can be increased and alternative energy sources facilitated Incresing of

the mobility of the young, the elderly, and the disabled

Part 6 AVs impact to retail market/businesses

EU and world retail AVs market
Benefits of Automated Vehicle Technology Impact of AVs on retail and location strategy
Autonomous Vehicles Marketing

Education in Automotive industry/Dual education

DAY 2

Autonomous Automotive Latest Innovations

Part 1 Smart (electro) Mobility innovations

Steps to clean mobility and clean energy systems batteries for automated and connected vehicles in context of Roadmap for an EU Battery Alliance

Part 2 Energy innovations

Perspective types of energy from renewable sources

Part 3 Machine innovations technologies

Smart (electro) Mobility

Part 4 Cars Design

Design research in the age of the mobility shift

Smart Mobility – architecture design

How Autonomous Cars Will Influence Exterier/Interier Design

May AVs impact geometric design ?

Part 5 Cars Cybersecurity

Need to Protect Automated and Connected Vehicles

Internet of things, Industrial Internet of Things (IoT and IioT) in Automotive Production

Security, Data Transfer and Data Storage - Special Cyber Security

Part 6 Cars charging

Will the Self-Driving Fleet Run on Electricity or Gas?

Will Autonomous Vehicles Charge Themselves ?

Robotic Snake Chargers vs. Wireless Charging Pads for Electric Self-Driving Cars

Part 7 Fifth generation networks (5G)

Providing innovative services such as interconnected cars

Part 8 Payment digitalization

Partnership with digital payment technologies

Business in the car ?

Part 9 AVs Hybrid or Electric

Part 10 Blockchain in automotive industry

Case studies, Best practicies, Experiencies / Trends in Driving Connected Vehicles development and Services

Automotive industry investors In AVs

Industry and Business

Which way will autonomous car technology generate profits ? Impact of AVs on the life cycle of Automotive Industry Impact of technology investments on the product

Building extra competitive position using complex technology or service in combinatikon with ecosystem networks of consumers , partners , government and INVESTORS

Hindrances of acceleration of adoption of autonomous vehicles on markets (AV's)

Safety of AVs systems Standards rules / decisions

Infrastructure readiness to accept range of AVs Innovations progress

Development costs

Widespread industry acceptance

Many old cars out of streets ? Recycling ?

Leading car - manufacturers and OEM on the way to Autonomous Vehicles, **incl. Job offers**

World key players in Automotive Industry

EU and world leading AVs manufacturers and their steps to market situation in new age of AVs

Automotive manufacturers in Slovakia

CEE Automotive manufacturers

Major component suppliers (OEM) in Slovakia

Education support of carmakers

Touch the future of impact of AVs on Economy of country in coming age of AVs technologies and manufacturing

Influence on economy the countries with cars manufacturing industry

What about economy impact of AVs development on Slovakia , the Giant of cars manufacturing

Governmental policy for support of AVs technology research, development, innovations and AVs implementation in Slovakia

Smart (electro) Mobility

Stimulating universities/academia - government - industry interconnection

Education support

ROUND TABLES of Summit conferences (Panel discussions)

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STARTUP STAGE

Meetings with investors in branch

Startups on the way to Autonomous Vehicles Technology Innovations

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EXPO PART OF AVs SUMMIT

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