

6th - 7th August 2020

A virtual drive through how the automotive industry is shaking up with Level-6 automation, experience designing, 3D model, AV AI & telematics for connected vehicle

MarketsandMarkets World ADAS & AD Conference



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Event Overview

What is the future of technology in Automotive industry? Automotive companies are embracing connected and smart technologies to offer safer and future-ready vehicles by investing in Advanced Driver Assistance Systems (ADAS). The battleground to win the customers is one of driving force for automotive manufacturers and OEMs to adopt the technology and lead the marketplace. However, the safety concerns and regulations around autonomous vehicles, communications systems, etc are limiting the acceptance of the technology.

Define the future of automotive trade by making the right powertrain technology choice & eliminate the failure of supply chain at MarketsandMarkets World ADAS & AD Conference. An excellent platform for experts from automotive industry, academia, and government institutions discussing the innovations, challenges, and future aspects of innovative technologies in automotive.



MarketsandMarkets World ADAS & AD Conference



6th - 7th August 2020

Key Highlights

- Artificial Intelligence, Machine Learning, and Deep Learning applications
- Case study from industry peers
- Panel discussions on future of Autonomous Driving, ADAS, Connected vehicles, and electric vehicles
- Infotainment and communication system
- Safety concerns
- ☐ Introduction to future technologies such as 5G, cybersecurity, and machine human interaction







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Meet our Esteemed Speakers



Steven Atneosen
Managing Director
Grand Chasm Ventures



Vienna Harvey Learning Technologist/ Autonomous Vehicle Engineer Udacity



Sasha Ostojic Operating Partner Playground Global



Yong Sun Supervisor, Autonomous Driving, AI data science and advanced methodology development Isuzu North America



Shyamala Prayaga Product Owner Digital Assistant Ford Motor Company



Mark Crawford CEO and CTO Interplai



Hesham Eraqi (Chairperson) Senior Expert of AI and Deep Learning Valeo Group



Shyam Sundar Global Head of Product, Autonomous Driving & Vehicle Software Platform Faraday Future



Kris De Meester VP Sales & Business Development XenomatiX



Sven Beiker
Founder and Managing
Director
Silicon Valley Mobility,
LLC



Hadi Nahari Founder, CEO Cognomotiv



Varun Katre Local Technical Leader, Autonomous Drive and ADAS Renault Nissan Technology and Business Centre India



Sanjay Khunger CTO 2THEDGE, LLC



Apar Rajendran
Enterprise Solutions
Architect
Connected Vehicles &
Products



Srinivas Reddy Aellala Principal Product, Autonomous Driving Ridecell



Sujith Vemishetty
Al Engineer, Autonomous
Driving Systems
Great Wall Motors



Sanjay Puri CVTA Board Member



Scott J. McCormick
President
Connected Vehicle Trade
Association



Jeremy Agulnek VP, Connected Car HAAS Alert



Meeta Dash VP Product Appen



Christian Umbach Co-Founder & CEO Xapix



Ilan Hayat
Director of Business
Development for
Automotive
Vayyar Technology



(Time Zone: CT)

09:00 Welcome note from Markets and Markets

09:05 Welcome note by Chairperson

Hesham Eraqi, Senior Expert of AI and Deep Learning, Valeo Group

AUTONOMOUS DRIVING

How to Make transition in Traditional automotive Company

- Challenges I meet to enable AI for data analytics and autonomous driving in a traditional companies Useful tips to overcome the challenge, including starting from a pipeline that provide interfaces to cross functional organiza tion to technology integration
- Some AI trends proved helpful based on experience, such as transfer learning, explainable AI

Yong Sun, Supervisor, Autonomous Driving, AI data science and advanced methodology development, Isuzu North America

09:40 Dynamic Conditional Imitation Learning Autonomous Driving

- Deep Learning Approaches to Autonomous Driving
- Resources Efficient Accurate Occupancy Grid Mapping
- Efficient Dynamic Global Route Planning
- Results and Conclusions

Hesham Eraqi, Senior Expert of Al and Deep Learning, Valeo Group

10:10 Solution provider presentation

10:40 Data is the New Diamond

- Automaker Evolution Mechanical -> Electrical -> Computerized
- Data Sources & Use cases
- Methodology conventional vs autonomous
- Data driven solutions
- Data Privacy & Security

Apar Rajendran, Enterprise Solutions Architect, Connected Vehicles & Products

11:10 Panel Discussion: The Future of Connected, Autonomous, Shared, Electric Vehicles (in a post-COVID world)

A conversation on how the automotive space and the CASE paradigm are changing in the post-COVID world due to COVID-19's impact on behaviors, economics, logistics and the environment

Moderator:

Hesham Eraqi, Senior Expert of AI and Deep Learning, Valeo Group

Panelists:

- **-Vienna Harvey,** Learning Technologist/Autonomous Vehicle Engineer, **Udacity**
- -Sanjay Puri, CVTA, Board Member
- -Shyam Sundar, Global Head of Product, Autonomous Driving & Vehicle Software Platform, Faraday Future

11:40 A novel Al approach for Lidar-only detection

- 'Traditional AI' uses 2D images to detect and classify objects.
- XenomatiX invented 4D-AI for superior detection results based on a more-dimensional space, provided by Lidar data.
- This approach is very suitable for real-time, in-vehicle detection using limited, embedded processing power.
- The presentation will explain the benefits of 4D-Al and show application results of classification results purely based on Lidar. Kris De Meester, VP Sales & Business Development, XenomatiX

11:55 One-to-One Networking Meetings

ADAS DEVELOPMENT

- 12:10 Potential bottlenecks in self-driving systems and will going "deeper" be sufficient?
 - Is driving really a narrow AI task?
 - Are all the sub-systems of an autonomous driving system at the same level of capability?
 - What can cause the potential bottlenecks in the future of building robust and reliable autonomous driving systems?
 - Examples of current AI mechanisms and techniques that require more research focus to evaluate their usability for these problems

Sujith Vemishetty, AI Engineer, Autonomous Driving Systems, Great Wall Motors

- 12:40 The Changing Mobility Landscape
 - Where the automakers are on automation
 - When will the OEMs go electric
 - What are the challenges and limitations
 - How do we move from reactive to preventative safety

Scott J. McCormick, President, Connected Vehicle Trade Association

- 13:15 Presentation by Opsys-tech
- 13:45 Networking at the Lounge Tab
- 14:00 End of Day 1

(Time Zone: CT)

09:00 Opening Remarks from MarketsandMarkets

09:05 Welcome note by Chairperson

Shyamala Prayaga, Product Owner Digital Assistant, Ford Motor Company

INFOTAINMENT SYSTEMS

09:10 Ethical AI Virtual Assistants

- Understand AI assistants and their touchpoints
- Understand how we can make AI ethical
- Understand how we can humanize Privacy

Shyamala Prayaga, Product Owner Digital Assistant, Ford Motor Company

09:40 Comprehensive Data Pipelines for Automotive AI

- It's no secret that there is an enormous business opportunity with the rise of autonomous vehicles and the connected car
- Whether you are building a fully autonomous vehicle, improving driver assistance features, or in-cabin experience, high-quality annotated training data is the key to effective AI systems
- This session will help take you from Level 1 to Level 5 autonomy, driving you ahead of the competition
- In this session, we will discuss automotive AI trends and how to avoid common pitfalls, and present case study examples to show how to effectively build comprehensive data pipelines for automotive AI

Meeta Dash, VP Product, Appen

10:10 Smart Connectivity – The Backbone of Future Mobility

Sanjay Khunger, CTO, 2THEDGE, LLC

CONNECTED VEHICLE TECHNOLOGIES

10:40 How Vehicle-to-Vehicle Communication Must Evolve

- The path to full autonomy will look like a series of innovation jumps versus a massive leap, which each jump advancing the industry towards the end goal.
- Safety will be a common thread throughout this journey and will require solutions that can cover all vehicles on the roadway using different technologies.
- Getting ALL vehicles on the roadway to communicate "safety" with each other consumer vehicles, Public Safety, tow trucks, construction & maintenance fleets, trucking, etc. will only be possible if these different technologies can understand each other.
- Until all these vehicles are speaking the same language, Vehicle-to-Vehicle communication platforms must be able to deliver reliable, high-speed "translation" services.

Jeremy Agulnek, VP, Connected Car, HAAS Alert

11:10 Artificial intelligence or infrastructure - what's the missing piece for autonomy?

- Autonomous driving has been a research topic for decades and over the last 10 years great progress has been made in particular to bring lower level automation systems to the market
- And still, the established industry as well as disruptive players seem to be hesitant to go further and offer driving without human interaction
- In that context, more artificial intelligence and more infrastructure support are often suggested as solutions to close the gap
- However, those two solutions are also discussed quite controversially as there seem to be two competing camps: one favors AI with limited infrastructure integration and one favors V2X with limited artificial intelligence
- This talk will highlight recent R&D activities related to AI and V2X and wants to offer a reconciliatory perspective for the two
 missing pieces in the automation puzzle

Sven Beiker, Founder and Managing Director, Silicon Valley Mobility, LLC



11:40 Panel Discussion: Al Creates a New World Order in Transportation. COVID19 and beyond Market Growth for Applied Al - Who will Win and Who will Fade Away

- The effects of global climate change continue to stress our transportation systems and provide significant opportunity for new players who will accelerate electric, connected and automated vehicles
- With the convergence of cost effective batteries, edge computing, connectivity, data access and applied AI, what do recent success stories tell us on how the future will unfold
- COVID19 has accelerated the impact of global climate change as well as governments' response to address it. Join us for a practical conversation around who will be left standing

Moderator:

-Steven Atneosen, Managing Director, Grand Chasm Ventures

Panelists:

- -Hadi Nahari, Founder, CEO, Cognomotiv
- -Sasha Ostojic, Operating Partner, Playground Global
- -Christian Umbach, Co-Founder & CEO, Xapix

12:25 Presentation by Vayyar

Ilan Hayat, Director of Business Development for Automotive, Vayyar Technology

12:40 One-to-One Networking Meetings

ROBOTICS & FUTURE OF AUTOMOTIVE INDUSTRY

12:55 Last-Mile Delivery with Collaborative Robots-as-a-Service

- AV production deployments face significant challenges in maximizing efficiency to drive down costs
- Multiple automated vehicle designs and configurations will be needed to fully address all customer and business needs
- This talk will explore how concepts from heterogeneous multi-robot systems can improve AV deployments to make them more economically viable

Mark Crawford, CEO and CTO, Interplai

13:25 Au ro's "Scenario Extraction and Generation tools" to address the challenge of identifying interesting/edge-case dynamic events from vast driving logs of ADAS and AV systems.

- How can you extract interesting/meaningful scenarios (dynamic events) from hours of test drive logs?
- How can you create a diverse scenario dataset for training Reinforcement Learning agents?
- How can you extract the relevant driving attributes for insuring your Autonomous Driving systems?
- Why isn't there a human driving model database in the industry today that benchmarks good vs bad driving behaviours in different cities and scenarios?

Srinivas Reddy Aellala, Principal Product, Autonomous Driving, Ridecell

13:55 Closing Remarks from the Chair

Hesham Eraqi, Senior Expert of AI and Deep Learning, Valeo Group

14:00 Networking at the Lounge Tab