

# GENIVI Virtual Member Meeting May 2021

## Session Schedule & Links

**Tuesday, 4 May 2021**

| Title                                                                                                                                                                                                                                                                                                        | Video Links                                                                                                                             | Slides                                                                                                                                                                                                                                                                                          |
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| <b>Keynote - The Value of Standardized Connected Vehicle Data</b><br><br>Christoph Ludewig, VP CEO Europe, Geotab                                                                                                                                                                                            | <a href="#">Recorded Session</a>                                                                                                        | pdf                                                                                                                                                                                                                                                                                             |
| <b>How Standard Vehicle Data Benefits the Insurance Industry</b><br><br>Moderated by Steve Crumb, Executive Director, GENIVI<br><br>Fouad Hussein, Founder, Open Insurance Think Tank<br><br>Mario Ortegon-Cabrera, Senior Program Manager, Microsoft Azure Mobility<br><br>Kevin Valdek, CTO, High-Mobility | <a href="#">Recorded Session</a><br><br><i>*Note: The video by Mario Ortegon-Cabrera is embedded and can be viewed in the PPT slide</i> | <a href="#">FouadHusseini_Why the Insurance Industry Benefits from Standard Vehicle Data_1535 CEST.pptx</a><br><br><a href="#">KevinValdek_How Standard Vehicle Data Benefits the Insurance Industry_04May_1535CEST.pptx</a><br><br><a href="#">Mario Ortegon_ insurance_04May_1535CET.pptx</a> |

**Wednesday, 5 May 2021**

| Title                                                                                                                                                                                                                                                                                                                                                                                                                                                | Video Links                      | Slides                                                                                                                                                                                                                                                                   |
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| <b>Welcome &amp; GENIVI Updates</b><br><br>Steve Crumb, GENIVI                                                                                                                                                                                                                                                                                                                                                                                       | <a href="#">Recorded Session</a> |                                                                                                                                                                                                                                                                          |
| <b>Keynote: Vehicle Data is the Lifeblood of Commercial Vehicle Operations</b><br><br>Brian Carlson, Director, Global Product & Solutions Marketing, NXP Semiconductors                                                                                                                                                                                                                                                                              | <a href="#">Recorded Session</a> | <a href="#">Vehicle Data is the Lifeblood of Commercial Vehicle Operations _NXP</a>                                                                                                                                                                                      |
| <b>Keynote: Common Semantic Approaches In &amp; Beyond the Vehicle</b><br><br>Christian Kerstan, Systems Engineering BBM Technical Strategies, and Enabling, Robert Bosch GmbH<br><br>Rainer Lang, Vice President, Business Chief Digital Office Mobility Solutions, Robert Bosch GmbH                                                                                                                                                               | <a href="#">Recorded Session</a> | <a href="#">Keynote Day 2_Bosch Presentation</a>                                                                                                                                                                                                                         |
| <b>GENIVI Projects - Technical Status Updates</b><br><br>Hypervisor Project - Adam Lackorzynski, Kernkonzept<br><br>Android Automotive Vehicle Hardware Abstraction Layer - Stefan Wysocki, TietoEvy<br><br>Android Automotive Audio Hardware Abstraction Layer - Suhasini Raghuram, Analog Devices<br><br>Cloud and Connected Services - Kevin Valdek, High-Mobility<br><br>Common Vehicle Interface Initiative - Gunnar Andersson, GENIVI Alliance | <a href="#">Recorded Session</a> | <ul style="list-style-type: none"><li>- Hypervisor Project / Automotive Virtual Platform Specification slides</li><li>- CCS-Cloud &amp; Connected Services Technical Status</li><li>- Android Automotive VHAL slides</li><li>- Android Automotive Audio slides</li></ul> |
| <b>Common Vehicle Interface Initiative Workshop #1</b>                                                                                                                                                                                                                                                                                                                                                                                               | <a href="#">Recorded Session</a> | -                                                                                                                                                                                                                                                                        |

**Thursday, 6 May 2021**

| Title                                                                                                                                                                                                                                                                                                                                                                                                                                  | Video Links / Session Playback | Slides                                                                                                                                                                                    |
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| Cloud & Connected Services Technical Workshop 1                                                                                                                                                                                                                                                                                                                                                                                        | Recorded Session               | <ul style="list-style-type: none"> <li>■ Introduction to PaaS, IaaS, Cloud and more</li> <li>■ Mapping CCaaS to AWS services</li> <li>■ Mapping CCaaS to Google Cloud services</li> </ul> |
| Common Vehicle Interface Initiative Workshop 2                                                                                                                                                                                                                                                                                                                                                                                         | Recorded Session               |                                                                                                                                                                                           |
| Android Automotive SIG Technical Workshop 1                                                                                                                                                                                                                                                                                                                                                                                            | Recorded Session               | Android Automotive VHAL workshop                                                                                                                                                          |
| In-Vehicle Payment SIG Workshop                                                                                                                                                                                                                                                                                                                                                                                                        |                                |                                                                                                                                                                                           |
| <b>Introduction and Overview</b><br><br><b>Speaker:</b> John Moon- COO at ConnectedTravel and GENIVI IVP/EV SIG Lead<br><br><b>Abstract:</b> Welcome everyone, Update on the IVP SIG, Report on related upcoming events                                                                                                                                                                                                                | Recorded Session               | GENIVI AMM IVP SIG Slides                                                                                                                                                                 |
| <b>EV and Fuel Transactions</b><br><br><b>Speaker:</b> Will Judge, VP at Mastercard<br><br><b>Abstract:</b> Mastercard has been a leader in connected car commerce and has been engaged with the merchant and automotive companies including GM, HERE, Honda, Soundhound, Sonic, and White Castle. Hear about Mastercard's latest work in connected car and fuel transactions and learn about how they are thinking about EV payments. | Recorded Session               | Mastercard Ryd Pay.pdf                                                                                                                                                                    |

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| <b>Challenges and Opportunities in EV Charging Payments</b><br><br><b>Speakers:</b> Niclas Gyllenram, Director of Software Development at Volvo, and Will Judge VP at Mastercard<br><br>EV growth will introduce new first-time drivers to electric cars and along with it the task of educating customers on what it means to own an electric car. Paying to charge the car when away from home is becoming a growing complexity for new EV owners compared to the convenience of fueling at a gas station. Join us for a fireside chat with Volvo and Mastercard as they discuss their views on the challenges and opportunities OEMs face with customers paying for EV charging.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Recorded Session    | No slides for this session                     |
| <b>Vehicle location-based services (VLBS) at Scale</b><br><br><b>Speaker:</b> Evgeny Klochikhin, CEO at Sheeva.AI<br><br><b>Abstract:</b> Enabling Location-Based Services for Cars to monetize in-vehicle connectivity – Sheeva.AI will present a case study on the first autonomous, cloud-based VLBS solution enabling automatic, contactless payments and last-mile services for EV charging, fueling, road-usage charging, parking, and other critical applications without new physical infrastructure or hardware installed inside connected vehicles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Recorded Session    | VLBSat Scale. pptx                             |
| <b>Challenges for Compliant In-Car Payments in Europe</b><br><br><b>Speaker:</b> Jakob Gajdzik, Product Owner eCommerce Digital Transactions at BMW<br><br>Abstract: As an OEM, there are a series of questions to consider even before in-car payment can be designed technically. Regulations such as PSD2, authentication methods, available standards, and payment process constraints need to be considered. Join us on our road towards compliant in-car payments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Video not available | Challenges for Compliant In-Car Payments. pptx |
| <b>Automating Fleet Payments</b><br><br><b>Speaker:</b> Khalid Elawady, Chief Product Officer at CarIQ<br><br><b>Abstract:</b> Fleet administrators know that monitoring, verifying, and reconciling payments related to operating a vehicle is a time-consuming necessity. Machine banking allows cars to connect directly with merchants to transact for any type of service and addresses these needs and more.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Recorded Session    | Automating Fleet Payments Khalid el-Awady      |
| <b>The EV Charging Ecosystem: Building Out EV Infrastructure</b><br><br><ul style="list-style-type: none"> <li>• Moderator - John Moon (Connected Travel)</li> <li>• Honda - Boris Polania (Lead Architect)</li> <li>• Tritium - Julian Lile (Manager of Automotive OEM &amp; Fleet)</li> <li>• Arrive - Ed Lewis (Senior Vice President)</li> <li>• Sygic - Giles Shrimpton, (Managing Director Automotive and eMobility)</li> </ul> <b>Abstract:</b> OEM's, municipalities, and governments globally are committing to the growth of EVs, leading to the need to rapidly develop and deploy supporting infrastructure to meet the demands of consumers. This new demand presents an opportunity, but also requires, OEMs, suppliers, service providers, and municipalities to collaborate to deploy services to new customers. Our panelist will share their perspective on how they see the ecosystem working together and the challenges they face in this developing market.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Recorded Video      | No slides for this session                     |
| <b>GENIVI Security Team Workshop</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     |                                                |
| <b>GENIVI Security Team Overview</b><br><br><b>Speaker:</b> Joby Jester, Solutions Architect at Irdeto and GENIVI Security Team Lead<br><br><b>Abstract:</b> Welcome everyone, About the GENIVI Automotive Cybersecurity Team, How to get involved and engage with the team, and lastly what the agenda for the day will be                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Recorded Session    | GENIVI Security Team 1pg.pptx                  |
| <b>On Transforming Automotive Cybersecurity: Bridging gaps, Opportunities, and Diversity</b><br><br><b>Speaker:</b> Ikjot Saini, Academic Director ASRG And Assistant Professor Academic Network<br><br><b>Abstract:</b> With the increasing demand for connectivity and the rapidly evolving Autotech sector, cybersecurity concerns have raised exponentially. The global automotive cybersecurity job markets are in a talent crunch and need reskilling, upskilling, and cross-disciplinary competencies to manage the risks in this emerging cyberspace. SHIELD automotive cybersecurity center of excellence at the University of Windsor is dedicated to the development of industry-ready solutions to meet the rapidly changing technology and threats. SHIELD also focuses on training to lower the barrier to entry and create an industry-ready talent pipeline. To enable knowledge transfer and collaborations among research labs at the academic institutions, globally, ASRG is building an academic network for the researchers and graduate students to provide the support network of auto security scholars. One of the important aspects which are often overlooked is diversity at the workplace. In this emerging field, where both automotive and cybersecurity have records of significantly low representation of women, diversity is a major challenge. In 2021, women hold 25% of the cybersecurity jobs globally (source) which has doubled in a decade. While in automotive, the percentage has increased only by 1% from 2014 to 2018( from 7 to 8), with no women on the executive teams of over half of the top 20 companies. The statistics indicate the grim state of the diversity in automotive cybersecurity in the future. This can only be changed by actively and collectively working on diversity and inclusion. | Recorded Session    | No slides for this session                     |

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| <b>The Implications of Biometric Data in the Vehicle</b><br><br><b>Speaker:</b> Jennifer Dukarski, Emerging Technology, IP and Media Litigation at Butzel Long<br><br><b>Abstract:</b> Biometric data includes physical or behavioral human characteristics that can be used to digitally identify a person to grant access to systems, devices or data. In terms of biotechnology in the car, researchers proclaim “give me 10 biometric sensors in the car and I’ll revolutionize healthcare.” But collecting this data comes with a price: enhanced security and privacy protections and regulations. This discussion will look at how global and local legal and regulatory frameworks impact the design, collection, and use of this potential treasure trove of data.<br><br>This topic will: <ul style="list-style-type: none"> <li>• Define the scope of biometric data and the regulatory frameworks that apply in the US and internationally</li> <li>• Address regulatory directives for security and privacy with the collection, storage, and use of biometric data</li> </ul>            | Recorded Session                                 | Biometric Data Presentation Dukarski.pptx |
| <b>Navigating the Current Threat Environment</b><br><br><b>Fireside:</b> Claudia Rast, Department Chair Cybersecurity at Butzel Long, and Scott Bailey Partner at N1 Discovery<br><br><b>Abstract:</b> It’s hard to overemphasize the importance of maintaining robust privacy and data security measures. Not only are hackers becoming more sophisticated in their offensive weaponry—even harnessing AI to launch their attacks—but with 1 in 4 Americans continuing to work from home through 2021, threat actors have a broad and largely unprotected threat landscape to harvest. In addition, with fewer employees present at any given time in their traditional office environments, physical security is also important. Recent trends include hacking insurance companies to discover those insureds that have sufficient cyber coverage to afford high ransom demands. We will discuss these and other evolving cybersecurity threats that are present today and that we expect in the coming year and will describe the tools and best practices currently available to augment defenses. | Recorded Session                                 | Rast_ & Bailey_Cybersecurity_Roadmap.PPTX |
| <b>OpenXSAM</b><br><br><b>Speakers:</b> Dirk Leopold, Regional Director at itemis AG, Brandon Barry CEO at Block Harbor Cybersecurity<br><br><b>Abstract:</b> Wouldn’t it be nice if you could export cybersecurity data from your TARA tool and import it into your requirement management platform or verification environment? One of the biggest challenges in automotive security is building cohesion between tools to speed up cybersecurity engineering. <a href="https://openxsam.io">https://openxsam.io</a> seeks to achieve this by building an open format to exchange security information for vehicles. In this talk, Itemis will give you an introduction to openXSAM and how it’s used by their TARA platform. Then, Block Harbor will talk about how they envision their integration of openXSAM into their automotive verification environment. You’ll walk away from this talk with new ideas on how you can create a seamless integration between your tools to make your vehicle cybersecurity engineering more efficient and more effective.                                    | Recorded Video                                   | brandon barry-dirkleopold_openXSAM.pptx   |
| <b>Break with the ASRG introduction Video</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ASRG Video                                       |                                           |
| <b>V2X / Cloud Managed Services Security Trends:</b><br><br><b>Speakers:</b> Brandon Barry, Joby Jester<br><br><b>Abstract:</b> Explore the trends of Automotive Cybersecurity brought to you by ASRG Leadership and the GENIVI Security Team. Chat about the near and far challenges for AV, EV, Mobility, and beyond! Tune in, sit back, and have a chat with us!                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Recorded Session                                 | Automotive Security Trends.pptx           |
| <b>Network Micro-Segmentation Cloaking Technology for Autonomous Vehicles</b><br><br><b>Speaker:</b> Will Hill, Security Technologist at CuDes, and Greg Shields, Director at NetFoundry<br><br><b>Abstract:</b> In this talk, we discuss a zero-trust cybersecurity solution that prevents remote access to any software app by hiding the internet connection to this app. Because a hidden-, cloaked-, dark-connection is used, the attack hackers cannot find what does not exist. A user can also implement micro-segmentation such that one software app can only talk to one other software app. The software app can be in the cloud or one app of many apps running on any device with an application processor. Simply put, any app which calls to the internet will be completely hidden from remote access. This is all orchestrated from the cloud as a 100% software solution and no hardware is involved whatsoever. It is free to prototype, right now, via the open-source community.                                                                                                 | Recorded Session                                 | Network MicroSegmentation_Day 3_Slides    |
| <b>Automotive Security Hacking &amp; Protection Practice</b><br><br><b>Pre-Recorded:</b> Vincent Zhang - Senior Security Architect at Tencent<br><br><b>Abstract:</b> Since the globally recognized “Tesla Model S remote hacking” public research in 2016, Tencent Security Keen Lab has conducted more than 30 connected vehicle security research projects with industry-leading OEMs. This presentation will illuminate common automotive security threats and attack chains based on our rich research experience, as well as mitigation & protection best practices.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Automatic Security Hacking & Protection Practice | No slides for this session                |

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| <p><b>Automotive Ethernet Specific Cybersecurity Protection Solutions with IDS/IPS)</b></p> <p><b>Speaker:</b> Gilad Bandel, VP Product &amp; Marketing at Arliou Automotive Cybersecurity</p> <p><b>Abstract:</b> The automotive industry is swiftly moving towards automotive Ethernet as the new in-vehicle network core. This technology comes with many new features and benefits, but it also comes with numerous legacy risks from the traditional IT Ethernet landscape, as well as from new, error-prone software that is developed. Automotive Ethernet risks need to be mitigated, with security and protection incorporated into new devices. This lecture will detail solutions to address and mitigate those threats and focus on IDS/IPS required functionality.</p> | <a href="#">Recorded Session</a> | No slides for this session |
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## Friday, 7 May 2021

| Title                                                           | Video Links                      | Slides                                                                                                                                                              |
|-----------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Common Vehicle Interface Initiative Technical Workshop 3</b> | Not Recorded                     | N/A. We had a continued discussion with the attendees around topics that were presented in the previous workshops, where you will already find the relevant slides. |
| <b>Cloud and Connected Services Technical Workshop 2</b>        | <a href="#">Recorded Session</a> | N/A. This session was primarily organized around the recorded live demonstration. Please refer to video.                                                            |
| <b>Android Automotive Technical Workshop 2</b>                  | <a href="#">Recorded Session</a> |                                                                                                                                                                     |

## Virtual Showcase Videos On-Demand (click on the video titles below to view)

| Company                           | Video Title (Click to Play Video's On-Demand) | Contact Information |
|-----------------------------------|-----------------------------------------------|---------------------|
| <a href="#">Hyundai - Genesis</a> | <a href="#">Video</a>                         |                     |