

AVSimulation partners with epicnpoc at DSC Europe 2024^{VR} to showcase new possibilities for Mixed Reality in Automotive Simulation

We are thrilled to announce our partnership aimed to showcase a groundbreaking Mixed Reality demonstration at the DSC Europe 2024^{VR} conference. This collaboration merges AVSimulation's advanced SCANeR software with epicnpoc's innovative BOWL[®] Smart-Cockpit, pushing the boundaries of immersion and realism in automotive simulation.



Bringing Mixed Reality to Simulation

AVSimulation and Epicnpoc are convinced of the need to go further than Virtual Reality for the Automotive industry, to push the boundaries of immersion and create more realistic simulation experiences.

Together we have created a Mixed Reality demonstration where you can test by yourself AVSimulation's SCANeR cutting-edge simulation technology in combination with Epicnpoc's BOWL[®] Smart-Cockpit software which brings simulation to the next level showing its impact on the life onboard the vehicle.

The advantages of mixed reality include:

- Natural Interaction: Occupants can interact with real-world objects and environments while drivers benefit from the advantages of virtual reality.
- Information Overlay: Drivers can see information such as speed, direction indicators, pedals, steering wheel, or gearbox directly overlaid on their real field of vision, enhancing interaction with the virtual environment. All occupants can interact with a functional infotainment system.
- Immersive Environments: OEMs and Tier1s can design future vehicles using both virtual and real elements, allowing them to test, proof their experience designs, and validate user journeys.

Pierre Sigrist, CTO & Co-founder of epicnpoc, emphasizes the uniqueness of this collaboration: *"Combining SCANeR's virtual simulation technology with BOWL[®] Smart-Cockpit in this first common demonstrator allows you to see interactions of a simulated event like a lane crossing, a proximity alert, or bypassing a speed limit into a Cluster display, multiple Infotainment screens, including audio alerts and lighting effects. AVSimulation brings its topnotch simulation capacities and epicnpoc brings them to life onboard the vehicle. What's even better is that this environment is totally customizable and opened to additional components thanks to BOWL's framework. You can imagine adding various sensors, e-mirrors, a HUD, sound bubbles, or software components such as avatars, TTS, Bio monitoring, User management... the limit is your imagination!"*

BOWL®: Make your experience real

BOWL® is a development tool (no-code and low-code) enabling collaboration between UX/UI Designers and Software Engineers. Its, by default, agility supports the development of complex systems, and the integration of software produced with MBSE, UX, UI, graphics or AI engineering tools. BOWL® generates portable code that can run on PC and can be scaled to production platforms.

Thanks to BOWL®, you can:

- Create your desired product experience by developing a stunning HMI connected to your various hardware ECU and software functions.
- Deploy your HMI software in multiple OS and hardware environments, optionally synchronize with a virtual twin, creating a Mixed Reality testing environment.
- Couple BOWL® to a driving simulator like SCANeR, to contextualize your cockpit HMI with the ability to control vehicle features (ADAS functions, autonomous driving, weather and traffic conditions) and guarantee a successful validation of you user experience in various road test conditions.

SCANeR: The Heart of Our Simulation Technology

At the core of our mixed reality demonstration is AVSimulation's SCANeR software. SCANeR is a powerful and versatile simulation tool designed to support the entire lifecycle of automotive development. From concept to validation, SCANeR provides a realistic and immersive environment for testing and validating vehicle dynamics, advanced driver-assistance systems (ADAS), and autonomous driving technologies.

Some of the key Features of SCANeR are:

- Comprehensive Simulation: SCANeR offers a wide range of simulation scenarios, from simple driving tasks to complex urban environments.
- Realistic Dynamics: The software accurately models vehicle dynamics, sensor behavior, and environmental conditions to provide a realistic simulation experience.
- Customization and Flexibility: SCANeR is highly customizable, allowing users to create tailored simulation environments to meet specific testing needs.
- Integration Capabilities: SCANeR can be seamlessly integrated with other tools and systems, making it an ideal choice for collaborative projects and advanced research.

DSC 2024: A Key Event for Automotive Simulation industry

The Driving Simulation Conference - DSC Europe 2024 ^{VR}, scheduled from September 18 to 20, is a pivotal event for driving simulation professionals. This conference brings together industry leaders, researchers, and innovators to discuss the latest advancements in driving simulation technology.

Participating in DSC 2024 is crucial for AVSimulation and epicnpoc as it provides a unique platform to showcase innovative solutions, engage with thought leaders, and explore new partnerships. The conference will feature a range of presentations, including keynotes on the latest research, industrial pitches, and product solution sessions that delve into the cutting-edge developments in simulation tools, autonomous and connected vehicles, and ADAS applications.

For Thomas Nguyen, Head of Products and Strategy at AVSimulation, *“Being present at DSC 2024 is a key opportunity for us to connect with the global simulation community, share our latest advancements, and gain insights into emerging trends. Partnering with epicnpoc is important as it allows us to combine our expertise in simulation with their innovative in-cockpit solutions, creating a more immersive and realistic experience for users. Our participation underscores our dedication to*

continuous innovation and collaboration. The DSC conference is an invaluable forum for exchanging ideas and showcasing our commitment to enhancing the capabilities of our SCANeR software.”

About AVSimulation

AVSimulation is a leader in the field of automotive simulation, providing cutting-edge solutions for vehicle development and testing. Our flagship product, SCANeR, is used by OEMs, Tier1 suppliers, and research institutions worldwide to simulate and validate vehicle performance in a virtual environment.

For more information, contact us at www.avsimulation.com

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About epicnpoc

Create your smart product experiences better and faster with the tools you need to quickly turn your concept into an interactive prototype. Work with a team of design and software engineering experts that have supported concept cars and completed over 25 high-profile PoCs with global corporations, government, and educational institutions. If you work on smart products that provide interaction and generate emotions, then jumpstart your future product experience today!

For more information, visit www.epicnpoc.com

For Communication contact contact@epicnpoc.com