# Sheila: The Empathetic AI Co-Driver
Dynamic Human-Vehicle Interaction Built on Generative AI

Let us introduce you to Sheila, Smart Eye's in-cabin AI assistant and a CES 2025 Innovation Awards® honoree. Sheila combines in-cabin sensing with the conversational intelligence of Large Language Models (LLMs) to create a responsive and emotionally attuned experience for everyone in the vehicle.
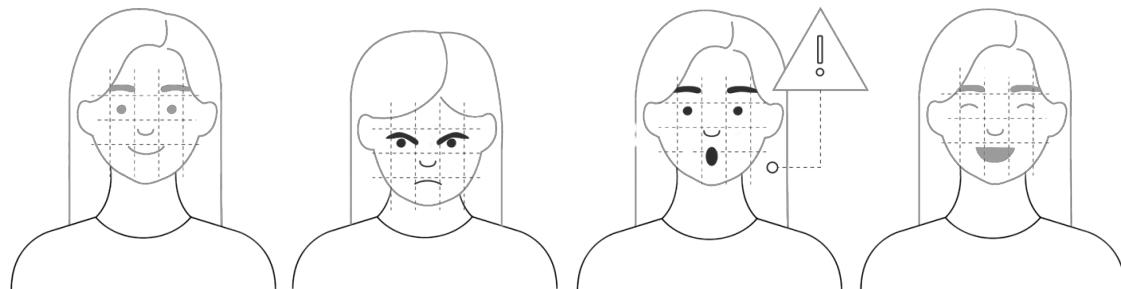
/ How Does Sheila Work?

Sheila leverages Smart Eye's advanced in-cabin sensing technology to analyze occupant states in real time, from eye movements and facial expressions to posture, activity (such as phone use), and who's present in the cabin. This helps Sheila understand not only how the driver is behaving, but who they're interacting with. As the data feeds into Sheila's generative AI capabilities, based on LLMs, it enables her to adjust her interactions based on situational awareness. That's what separates Sheila from other in-vehicle voice assistants – she's able to tailor her responses to create more human-like interactions.

/ Personalized AI That Gets You

Sheila's facial recognition technology and memory lets her become familiar with recurring occupants and adjust her tone accordingly, creating a more relaxed, familiar interaction.

With each interaction, Sheila fine-tunes her responses, becoming more intuitive and context-aware. She can be lighthearted with frequent passengers or remain focused and professional in critical driving moments, ensuring her interaction style suits the situation.

smart eye

For CES 2026, Smart Eye will demonstrate this concept using a driver monitoring camera that focuses on the gaze movements, facial expressions, emotions, speech, and activities of the driver.

However, using a wide-angle cabin monitoring camera, the technology could be extended to also include other people and objects present in the cabin.

Enhancing Vehicle Experiences Through an AI Companion

With her empathetic capabilities, Sheila is designed to support drivers and passengers in various ways:

Safety Applications

- Deliver timely, context-aware verbal warnings when the driver shows signs of fatigue, distraction, or impairment
- Reduce reliance on screens by offering spoken guidance during complex driving situations, easing cognitive load
- Adapt Sheila's level of interaction based on driving demand – staying quiet during high-focus moments and re-engaging when the road allows
- Clearly explain safety-relevant events or alerts through natural conversation, instead of relying solely on icons or visual warnings
- Support smoother takeovers in semi-automated driving by assessing driver readiness and adjusting communication accordingly
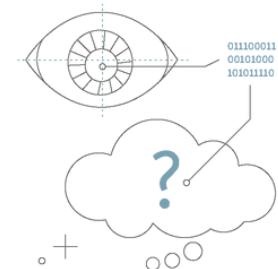
Entertainment and Engagement

- Engage drivers through natural conversation during low-demand moments, including light games, jokes, and interactive prompts
- Proactively adapt music playlists based on recognized song preferences and reactions
- Introduce AI companions with diverse and amusing personalities for a more enjoyable journey

Wellness and Comfort

- Offer personalized interactions with adaptive personalities to suit individual preferences
- Assist drivers in unwinding empathetically during post-work commutes
- Actively engage with occupants to uplift their mood and enhance their overall well-being during the journey