

Cerence to Bring First-of-its-Kind Voice and Multi-Modal Interaction to Autonomous, Electric Vehicle at CES 2020

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Industry Leaders Cerence, e.GO MOOVE, e.GO Digital, and Saint-Gobain Sekurit Join Forces to Show How Natural Interaction Will Build Trust in Autonomous, Shared and Electric Vehicles

LAS VEGAS (CES 2020) and BURLINGTON, Mass., Dec. 19, 2019 (GLOBE NEWSWIRE) -- <u>Cerence Inc.</u> (NASDAQ: CRNC), <u>e.GO MOOVE GmbH</u> together with <u>e.GO Digital GmbH</u>, and <u>Saint-Gobain Sekurit</u> today unveiled their plans to showcase a revolutionary, multi-modal experience in the e.GO Mover, an autonomous, electric bus, at the upcoming Consumer Electronics Show (CES) 2020 in Las Vegas.



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Demonstrating a unique focus on the user experience in the autonomous, electric and shared vehicle of the future, Cerence will show how its speech recognition and natural language understanding and output, combined with speech signal enhancement and Saint-Gobain Sekurit's transparent screen technology, will enable people to interact with the e.GO Mover. Passengers will have the opportunity to engage with the vehicle during all phases of a simulated ride from the airport to a mobility hub: prior to and as the vehicle is arriving, as they are boarding the vehicle, during the ride, and as and after the vehicle departs. Key to this unique experience, the companies will showcase first-of-its-kind technology that enables people outside the vehicle to interact with it via speech recognition and the glass surface, a critical need as consumers look to understand how they'll safely and effectively communicate with autonomous vehicles in the future.

"Cerence proudly stands at the convergence of industry megatrends that are the driving forces of innovation in our industry today: connectivity, autonomy, shared mobility, and electrification," said Sanjay Dhawan, CEO, Cerence. "While many in the industry expect autonomous vehicle interaction to be led by the smartphone, we know that the first-of-its-kind, multi-modal, multi-language interaction experience we're showcasing at CES is one that will go miles in instilling trust and confidence and ultimately driving consumer acceptance and adoption of autonomous vehicles."

This first-of-its-kind user experience leverages core technologies from Cerence and Saint-Gobain Sekurit within the e.GO Mover, including:

- Multi-Language Automatic Speech Recognition (ASR) and Natural Language Understanding (NLU) enable passengers and people outside the vehicle to interact in a conversational style in their native language. The bus can automatically recognize which language is being spoken, critical for a situation in which multiple passengers could be speaking multiple languages. This also provides benefits beyond a human driver, who may have limited language understanding. The vehicle can determine whether someone is speaking in English or German, for example, and respond in kind.
- Text to Speech (TTS) and Natural Language Output allow the bus to communicate with passengers and those outside the vehicle with smooth, human-like speech and a multitude of language and voice options for a truly localized experience. In addition, emotional TTS allows for a change in speaking style based on content and circumstances. For example, important alerts for the passengers can be communicated with a more urgent tone, and delays can be announced in an apologetic voice.
- Speech Signal Enhancement (SSE) removes noise from microphone inputs and enables distinct speaking zones so

speech from only one speaker is picked up – important for the shared vehicle environment and for interaction with the bus from the outside.

• **Transparent screen technology** enables projection of information both inside and outside the vehicle. Applications include a concierge or rider assistant avatar positioned behind the "driver's" seat; overview information about the trip displayed at key positions throughout the vehicle; opportunities for personal interaction positioned near each seat; and external projection to show those outside the vehicle information like its route. Outside view is not compromised, as passengers can still see through the projected images.

"The autonomous mobility landscape of the future will create new challenges for consumers as they look to navigate the increasingly smart city," said Prof. Günther Schuh, CEO, e.GO MOOVE. "In an autonomous setting where there isn't a driver, giving people a natural way to interact with the vehicle and gain information about it will be important, especially with an electric vehicle like our e.GO Mover that moves quietly throughout the urban environment and needs to deliver information to people outside the bus."

"We are excited to continue our work with Cerence to show our transparent screen technology in this new context of autonomous, electric, shared mobility," said Laurent Cohen-Scali, VP Sales, Marketing, Projects, Saint-Gobain Sekurit. "The glass inside the vehicle is valuable real estate for sharing information with passengers. Further, interaction with a vehicle from the outside leveraging transparent screen technology and voice interaction will open a whole new dimension of vehicle interaction built with the autonomous and smart city landscape in mind."

Cerence, e.GO MOOVE, e.GO Digital, and Saint-Gobain Sekurit will showcase this unique experience for the first time at Cerence's booth at CES 2020 (North Hall: Booth 9305). For press and analysts interested in a demo, please contact press@cerence.com.

About Cerence Inc.

Cerence (NASDAQ: CRNC) is the global industry leader in creating unique, moving experiences for the automotive world. As an innovation partner to the world's leading automakers, it is helping transform how a car feels, responds and learns. Its track record is built on more than 20 years of knowledge and almost 300 million cars on the road today. Whether it's connected cars, autonomous driving or e-vehicles, Cerence is mapping the road ahead. For more information, visit www.cerence.com.

About e.GO MOOVE GmbH

e.GO MOOVE GmbH, a company founded in 2018 between e.GO Mobile AG and ZF Friedrichshafen AG, develops people movers as well as shuttles and produces the e.GO Mover in Aachen. Due to its affordable price, the electric bus enables economical on-demand traffic and extends the classic public transport service. Series production will start in July 2020. At a later time, this bus from e.GO MOOVE GmbH will provide highly automated driving. For more information, visit <u>www.e-go-moove.com</u>.

About e.GO Digital GmbH

Together with leading technology companies, e.GO Digital GmbH develops data-based business models as well as business apps, which accomplish an overvalue due to the consequent simplification of business processes and client applications in the ecosystem of new mobility. For more information, visit <u>www.e-go-digital.com</u>.

About Saint-Gobain Sekurit

Saint-Gobain Sekurit is a leading manufacturer of car glazing for over 80 years. As part of the Saint-Gobain Group, it has access to more than 350 years of experience and know-how. Saint-Gobain Sekurit offers glazing solutions that improve comfort and mobility experience while contributing to a safer and more sustainable mobility. Saint-Gobain Sekurit provides high added-value products and services on three markets:

- · Automotive glass originally installed by automakers
- Automotive glass replacement
- · Glass for transport vehicles

For more information, visit www.saint-gobain-sekurit.com.

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Source: Cerence Inc.