

Motherson is announcing a collaboration with a startup to develop an Artificial Intelligence (AI)-based platform to detect human presence in the vehicle.

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As the automotive industry continues to shift to a more automated future, the need for safety features in the vehicle are becoming more important than ever. This includes features such as occupant monitoring to detect if and when a child is accidentally left inside a vehicle unattended. The Motherson Group, a global Tier-1 automotive supplier, utilizes the broad capabilities of the various divisions to bring new technologies to the market. One of their focus areas is in-cabin monitoring as a safety offering to their customers. Motherson is announcing a collaboration with Gestoos, a startup based out of California, whom the group met through Startup Autobahn Powered by Plug and Play. Gestoos specialises in using artificial intelligence (AI) for human detection and behaviour monitoring. The primary objective of the project is to detect infants reliably in baby seats in both the front and rear-facing orientations.

Motherson and Gestoos have been working together on a pilot project to build a computer vision model for detecting toddlers that have been left unattended in the rear seat of a vehicle. "An interest was established when Motherson met Gestoos at a Startup Autobahn event in 2019 on the topic of intuitive HMI," explained Mukesh Patel, R&D Manager, "since then we have been closely interacting together, we have been impressed by the Gestoos Creator platform which enables a fast, flexible, and reliable environment for rapid implementation of functions". The ongoing activities between the parties have resulted in validation of the initial idea of a child presence detection model using Gestoos' Creator platform. "In-cabin monitoring solutions are becoming increasingly important and we will continue to test and validate solutions such as Gestoos' technology to add to our customer offering," said Timo Schwarz, Chief Technology Officer of Motherson Innovations.

Gestoos was looking for new users of its recently launched Creator Platform, and the collaboration with Motherson provided the perfect opportunity. Todd Stein (CEO) discussed the proprietary technology, "Gestoos Creator is a powerful, cutting edge technology platform to train detection models for any human activity, movement or gesture whether person or person+object. Leveraging both incremental and semi-supervised learning techniques along with predeveloped backbone models, Gestoos Creator generates edge solutions that are both more accurate and more robust with far lower training data requirements". The Gestoos Creator Platform is compatible with both 2d and 3d camera sensors, and the resulting detection engines are optimized for chipsets from the leading manufacturers.

Motherson and Gestoos will present on the computer vision model for rear seat child detection for the first time at the Start-up Autobahn EXPO 10 on July 22nd, 2021.

About Motherson

Motherson operates as a full system solutions provider for its customers. The product portfolio includes electrical distribution systems, fully assembled vehicle interior and exterior modules, automotive rear vision systems, moulded plastic parts and assemblies, injection moulding tools, moulded and extruded rubber components, lighting systems, electronics, precision metals and modules, Industrial IT solutions and services and new innovative technologies such as wireless power etc. The group has expanded its presence to support customers in new segments including health and medical, aerospace and logistics. The diversified range of technologies and capabilities allows Motherson to support a wide spectrum of sectors, with automotive as the main industry served.

For more information please visit www.motherson.com.

About Gestoos

Gestoos is a leading provider of activity recognition and spatial interaction software with offices in San Francisco and Barcelona. The company's core product is a computer vision based artificial intelligence solution that enables camera (sensor) equipped devices detect, understand and respond to human gestures, movements and activities. Gestoos' patented technology not only provides the most robust solutions for gestural interaction, but more importantly increases safety through vehicle occupant monitoring and anomaly detection.

For more information please visit www.gestoos.com.