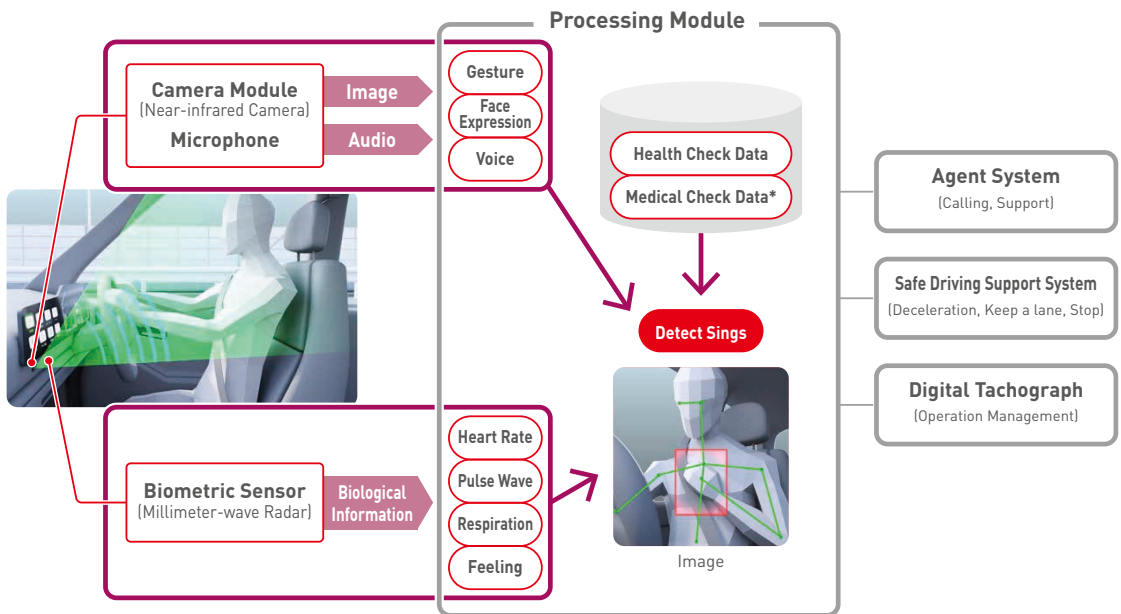# Detect signs of sudden changes in physical condition (before unconsciousness) from driver's gestures and biological information, and prevent accidents by linking with a safe driving support system

Back Ground

- **Recently, traffic accidents is decreasing, but it caused by health are getting increased**
- **We would like to reduce accidents due to sudden changes in physical condition**

Feature

- **In addition to biological information (heart rate, pulse wave, respiration etc.), driver's gestures and facial expressions are captured by a camera to detect signs of sudden changes in physical condition with high accuracy**
- **Detect and judge warning sings according to driver's condition linking with regular health check results and medical check data***

Performance/Specification

Processing Module

Camera Module (Near-infrared Camera) — Image
Microphone — Audio
Gesture, Face Expression, Voice

Health Check Data, Medical Check Data*

Biometric Sensor (Millimeter-wave Radar) — Biological Information
Heart Rate, Pulse Wave, Respiration, Feeling

Detect Sings

Image

Agent System (Calling, Support)

Safe Driving Support System (Deceleration, Keep a lane, Stop)

Digital Tachograph (Operation Management)

*Medical Check Data is about health care data from wearable devices and roll-call data that carriers check driver's condition before the operation.

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