

ENHANCING VEHICLE VISION IN LOW VISIBILITY CONDITIONS 24 HOURS AND 365 DAYS OF THE YEAR

One of the biggest remaining obstacles in marketing automated vehicles is the ability to drive under any relevant weather and lighting conditions. To date,

The key for market introduction is a robust perception system able to operate in all conditions experienced 365 days of the year.

most automated vehicles testing takes place in a small designated area with good weather conditions and even the best prototypes struggle or completely fail in adverse weather.

AI-SEE addressed this key challenge by developing a new perception processing scheme robust to disturbances that extends the performance of sensors to all visibility and adverse weather conditions.

All weather, fault-tolerant multi-sensor perception system supported by Al



- A high resolution adaptive all-weather sensor suite
- An AI platform for predictive detection of prevailing environmental conditions including signal enhancement and sensor adaption
- A novel simulation path which allows to realistically simulate adverse weather near the sensor to adapt and test the system on both real and artificially generated road scenes
- High definition maps with dynamic layers adaptable to changing weather conditions







Dr. Werner Ritter, Mercedes-Benz AG



Budget

20M total costs, 10M funding budget



6 Countries

Austria, Canada, Finland, Germany, Israel, Sweden

