

PEREGRINE.AI | PORSCHE

Making ADAS System Validation Scalable with a Smartphone

Peregrine.ai integrates AI-powered vision with Porsche Engineering ComBoxApp.

THE CHALLENGE

The vehicle validation of advanced driver-assistance systems (ADAS) with state of the art technology requires expensive measurement equipment, which is not scalable for large vehicle fleets. Therefore, only limited test scenarios can be addressed. Porsche Engineering Group (PEG) and Peregrine.ai teamed up to further advance the utilization of smartphone camera capabilities to detect objects in traffic. While PEG provided the smartphone to serve as data logger, connectivity and camera device, Peregrine.ai integrated their AI-powered vision for object detection at the edge.

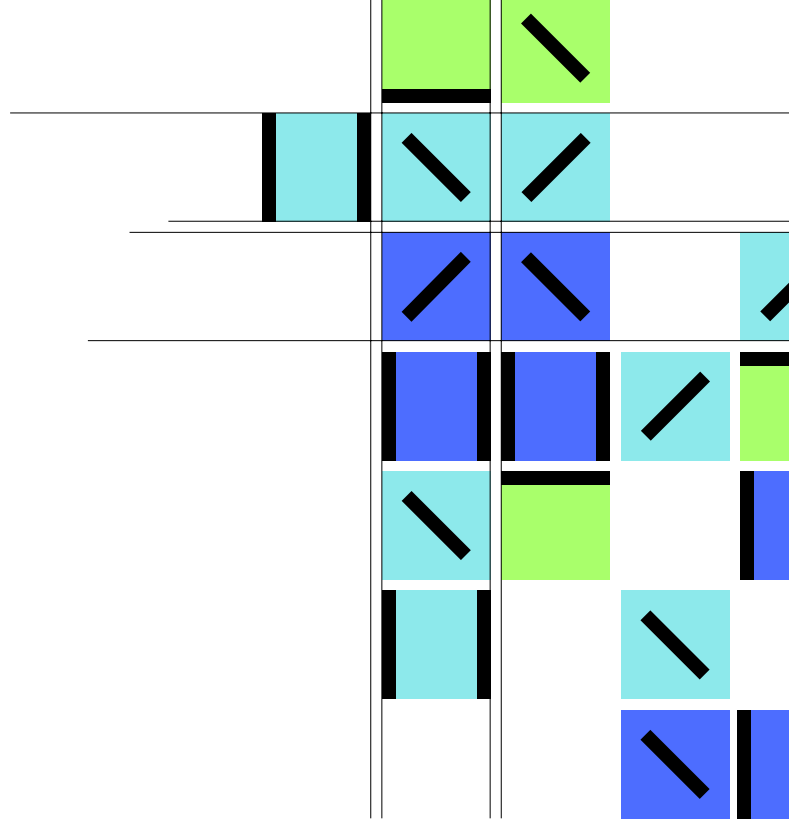
THE SOLUTION

With their ComBoxApp, Porsche Engineering can receive data from vehicle on-board systems. Peregrine's AI-powered vision, integrated with the same smartphone, detects objects in traffic and provides data via an internal interface. Within the ComBoxApp, both data sources are compared in order to validate the vehicle object detection.

THE OUTCOME

Traffic objects can successfully and reliably be detected with Peregrine's AI-powered vision and the ComBoxApp can automatically integrate this data for edge comparison. This unlocks a solution that significantly reduces manual evaluation effort as well as data bandwidth. The concept has been proven with traffic signs and will now be extended for more object classes. The final product is supposed to make ADAS validation scalable by using a smartphone.

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PEREGRINE.AI

WEBSITE

peregrine.ai

FOUNDED

2019

HEADQUARTERS

Berlin, Germany

NO. OF EMPLOYEES

10–50



Peregrine.ai creates new value from visual data in mobility.

Peregrine's technology makes cameras in mobility smart by processing AI-powered vision at the edge.

ABOUT STARTUP AUTOBAHN

STARTUP AUTOBAHN powered by Plug and Play is an open innovation platform that provides an interface between innovative tech companies and industry-leading corporations. The basis of the program is the partnership that develops between startups and the corporate business units. The two entities hold an equal footing from the get-go: together they evaluate the potential for a joint venture, move forward to pilot the technology, and work to achieve the ultimate goal – a successful production-ready implementation. Designed with the intention to exceed startup acceleration, STARTUP AUTOBAHN powered by Plug and Play moderates a community for collaboration with a focus on implementable results. Over the years, the platform has successfully cultivated over 400 projects with more than 300 startups since its founding in 2016.

ACKNOWLEDGEMENTS

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