Traffic Awareness Driver Assistance based on Stereovision, Eye-tracking, and Head-Up Display

Tobias Langner, Daniel Seifert, Bennet Fischer, Daniel Goehring, Tinosch Ganjineh, Raul Rojas

Motivation:
We present a system which is able to estimate the driver’s gaze direction in order to warn the driver when traffic lights or oncoming vehicles could have been missed by the driver.

System Description

Traffic Light and Vehicle Detection

Estimation of Gaze Direction

Head-Up Display

Demo