

## **Dependability for Self-Driving Cars**

Jonas Nilsson, Volvo Cars

Self-driving cars provide the potential to make traffic safer, smoother and more fuel-efficient. Driver misjudgements are the most common accident cause and automation means that traffic becomes less sensitive to these errors. However, automation also means that other sources of errors, such as design errors and technical faults, and insufficiency in understanding the environment are added to the system. These dependability challenges are key for market introduction of self-driving cars.

The Drive Me project is a pilot project that will put self-driving cars in the hands of real customers in a limited setting. 100 self-driving cars will be launched on public roads in everyday driving around the Swedish city of Gothenburg. This talk is based on experiences from the Drive Me project and focuses on the new challenges in safety and dependability brought by autonomy. In addition, the talk will elaborate on the impact these challenges has on safety assurance and verification.