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Ongoing BA and MA Thesis Topics in Automotive Security

Automotive and Internet Technology coalesce.

Car manufactures discovered the benefit of big data. They have started collecting data related to the control of their cars and the behavior of their customers. New connected features like autonomous driving and services like car sharing are on the edge to emerge.

The same time, the European government is currently working on a draft law for a mandatory mobile radio module for future new cars.

All of these future connected features and business cases require some kind of remote car access through e.g. Internet or GSM. Hence, IT Security is a fundamental issue in making the vision of autonomous driving and individualized services real.

To achieve this, the following research topics need to be addressed:

- 1. Deriving a Methodology for Risk Assessment and Vulnerability Analysis for Connected Cars
- 2. Designing a Safe and Secure Automotive IT Architecture for Autonomous Driving
- 3. Modeling Mature Software for Automotive Systems

From the above topics, BA and MA thesis topics can be derived.

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