* Security Vulnerabilities a threat to Automotive Innovation.

There are two areas of concern that should be addressed by the automotive industry. The first is the risk of **physical safety**:

* if vehicle control systems can receive remote connections, there’s always the chance that they are open to being compromised
* For example, three years ago US vehicle manufacturer Chrysler issued a formal recall of 1.4 million vehicles in response to a software vulnerability that allowed researchers to take complete control of a car over the air.
* The second area of risk that requires increased attention is **personal data privacy**
* Cars have become increasingly valuable generators of personal data. GPS navigation systems log journeys to reduce the time spent in traffic, dealerships are alerted when service intervals are reached, and insurance companies are able to dispatch help at the first indications of a serious accident.

**Enhancing cybersecurity measures**

* researchers were still able to show that the Electronic Control Unit (ECU) in a number of recently built cars from different manufacturers was susceptible to remote takeover via wireless networks even with the engine off.

**Introduction:**

The approach evaluates inter class and intra class variability for message authentication.

Explain dataset description:

Each plot represents data from each can