[ITI41120 Applied Computer Science Project](https://www.hiof.no/english/studies/courses/iio/itk/2023/spring/iti41120.html)

**Topic**: Vehicle state observer using Machine Learning

**Research areas involved:** Machine Learning

**Skills needed:** Experience with Machine Learning and Python programming

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**Content:** The purpose of this project is to come up with a machine learning algorithm that can estimate unmeasurable vehicle states from standard on-board vehicle sensors. This is an experimental project that involves:

* The use of the vehicle dynamics simulator Dyna4 to simulate scenarios with varied surface conditions and vehicle configurations
* The collection of a dataset from simulated sensors and ground truth signals available from the simulator
* The design and testing of Machine Learning algorithms that estimates vehicle states using simulated sensor data as input

