

DEVELOPMENT OF A DISTRIBUTED TEST PLATFORM FOR AUTOMOTIVE SYSTEMS: LAUNCH PROCESS STUDY

Supervisors: Dr.-Ing. Zhihong Liu, Safa Kaskaya M.Sc., L1|10 111, liu@ims.tu-darmstadt.de



BACHELOR THESIS

MASTER THESIS

ADP

AERO SPACE ENG.

MECH. ENG. (FUTURE AUTOMOTIVE SYSTEMS)

Motivation

At IMS, two test benches [CONNECT](#) (powertrain test bench) and [Driveception](#) (driving simulator) will be shared for a distributed investigation on powertrain system dynamics and their impact on subjective perception in the early development phase. The goal of this student work is to realize the networking of these two test benches and to survey their real-time performance for the vehicle launch process study.

Tasks

- Literature review regarding shared test bench and distributed measurement
- Conception of the distributed test platform with CONNECT and Driveception
- Analysis of the real-time performance of the distributed measurement
- Optimization of the Motion Cueing algorithm
- Investigation on the launch process

Requirements

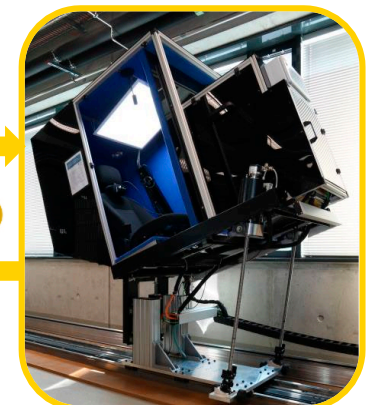
- Experiences with MATLAB, Python programming
- Network interaction
- Independent and structured work style

Begin

From now on



IMS CONNECT



Driveception