AVL is the world's largest independent company for development of powertrains (combustion engines, hybrid systems, electric drive) as well as simulation and test systems for passenger cars, trucks and marine engines.

We offer a master thesis:

Transmission Software Testing Methodology Development

Task:

The aim of this thesis is to develop a transmission software testing strategy. A few hints are proposed below:

- Defining high level testing requirements which is independent of transmission type
- Analysis and mathematical modelling of test criteria according to the defined test requirements
- Interaction between different disciplines to define the best drivability assessment strategies
- Implementation of a robust testing strategy
- Analysis of testing strategy in simulation environment with plant model and possibly on test bed and vehicle measurement

Depending on progress, possible further steps:

- Calibration optimization algorithm
- Plant model optimization with integration of real-time disturbances/system parameter variations.

Study:

- Student in his 5th year of studies.
- Preferably coming from FH University of applied sciences
- If you believe your profile is suitable, individual case assessment anyway.

Requirements:

- Matlab/Simulink
- Good understanding of vehicle dynamics, automatic transmission are an advantage.
- Good communication skills in German (spoken and written)
- Good communication skills in English (spoken and written)

Remuneration: The successful completion of the thesis is a one-time fee of EUR 2.500, - gross remuneration

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