The Forschungszentrum Telekommunikation Wien (FTW) is a dynamic company with an international atmosphere that carries out application-oriented research in telecommunications. Our mission is to fill the gap between science and industry, pursuing a challenging research program in collaboration with both academic and industrial partners. Currently we are offering a Master thesis for the following topic:

Non-Stationary Channel Estimation Algorithms for LTE-A Systems

Wireless communications with vehicles allows the design of future intelligent transportation systems (ITS) that enable a strong reduction in casualties on the road by exchanging information between vehicles in safety relevant scenarios like street crossings, merging lanes, or congestion. The wireless communication channel exhibits non-stationary properties due to the fast environment change and the high vehicle velocity. In order to enable LTE as vehicular communication method, channel estimation algorithms adapted to these conditions needs to be developed.

In the course of this master thesis work the student is supposed to extend an available simulation environment for LTE systems implemented in Matlab, with the goal to validate a non-stationary channel estimation algorithm for vehicular communications.

Needed skills include:

- A self-driven and autonomous (research oriented) working style.
- Good Matlab programming skills.
- A solid background in communication theory and signal processing for communications.
- Knowledge of current cellular technology is a plus.

The expected duration of the master thesis is 6 month. For master students from abroad we are able to provide a monthly financial compensation for the housing and living costs in Vienna.

FTW offers researcher positions for talented scientists interested to pursuit a doctoral degree. An excellent master thesis is a strong plus for a further possible employment at FTW.

Applications should be sent to
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