

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:

Evaluation of Digital Predistortion Structures in Simulink

Digital predistortion is a promising technique for the compensation of nonlinearities in power amplifiers for efficient wireless transmitters. To assess the trade-off between implementation complexity and linearization performance, it is necessary to create detailed models of the required signal processing structures and to evaluate the achieved performance on real hardware.

In the course of this master thesis, you are supposed to create Simulink models of existing digital predistortion structures and adaptation algorithms. The implementation complexity and linearization performance should then be evaluated by automatic code generation for an FPGA and measurement on real hardware.

Needed skills:

- A self-driven and autonomous (research oriented) working style.
- A solid background in signal processing.
- Experience with Matlab/Simulink.
- Interest for mixed-signal processing and concept engineering.

The expected duration of the master thesis is 6 month. For master students we are able to provide a monthly financial compensation.

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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