

Investigations of interference influences on data transmission based FMCW RadCom

The simultaneous operation of several radar sensors affects the radar measurements themselves, but also the communication which is transmitted among the radar signals.

For this reason, it is essential to examine its consequences for the quality of data transmissions related to the number of available radar sensors and different exploited waveforms.

In this work statistical simulations of interference should be performed resulting in a variety of typical generated traffic scenarios using Vissim Software from PTV company with the focus on Radar-Communication. Moreover, detection algorithms should be found in terms of data transmission.

Requirements

- Principles of radio frequency technology, signals and systems
- Good Knowledge of MATLAB
- Interest in new concepts and algorithms



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