

ALCAN Systems, Darmstadt

RF Antenna Engineer

Job Description

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This company's R&D team works on design, simulation, prototyping and test of phased array antennas which use liquid crystals (LC) as tunable material. More specifically, LC based phase shifters and amplitude tuners, RF planar structures, polarization agile structures, receive and transmit antennas are being developed.

The **RF Antenna Engineer** will be involved with the entire RF system of the antenna. The engineer will work on design, simulation, prototyping and test of flat panel antenna arrays, array topologies and antenna subsystems. It is important that the candidate has solid technical understanding of RF/microwave circuits, a track record of developing various kinds of RF hardware and ability to do measurements.

Tasks

- Design, simulation and prototyping of planar antennas, operating at Ku-band, Ka-band and 60 GHz frequencies
- Development and investigation of new planar array concepts
- Design, simulation and prototyping of polarization agile antenna elements and their feed networks
- Contribute different aspects of the integration of the radiating elements into whole LC based smart antenna

Experience

- Master's Degree in telecommunication, electronics or comparable discipline + 2 years industry experience or Bachelor's Degree in a similar program + 5 years industry experience
- Solid understanding of phased array theory and electronically steerable arrays
- Competency in using EM simulation tools like ADS, CST, HFSS, AWR and programming with MATLAB
- Experience with FCC and ITU Regulations

Key Competencies

- Ability to think out-of-box, problem solving, and adapt quickly to new technical areas
- Analyze the trade-offs between performance, manufacturability, cost and user experience
- Capable of interact in a cross-functional technical team
- Experience with RF test instruments and setups such as VNA, spectrum analyzer, anechoic chamber, etc.
- Track record of generating innovative solutions, successful hardware releases (patents are a plus)
- Experience in design and implementation of electronically tunable RF components is a plus
- Familiarity with 2D/3D mechanical design is a plus
- Confidentiality
- Team member
- Adaptability