OPEN POSITION: COMMUNICATION SYSTEMS ENGINEER

ALCAN is a high-growth tech company working towards a future where every moving vehicle (cars, ships, trains, planes) has broadband connection by using ALCAN’s ground-breaking liquid crystal based smart antennas. ALCAN’s patented technology enables ultra-thin, lightweight flat panel antennas which can track satellites fully electronically without any moving parts.

We are looking for enthusiastic individuals who want to be a part of this exciting change and work towards developing these antennas to make a global impact by enabling communication easier for every human being.

We have an open full-time position for a Communication Systems Engineer in Istanbul, Turkey.

ALCAN offers a comprehensive benefits package, including private healthcare coverage, relocation assistance and competitive salary.

JOB DESCRIPTION

The Communication Systems Engineer will be involved with the entire RF system of the antenna and its baseband communications. Thus, the candidate needs to have a track record of developing communication systems and solid technical understanding of RF/microwave circuits. The engineer will work on system requirements definition, system and subsytems design, development, integration and will support testing of RF Payloads and Communications Systems.

Responsibilities

- End-to-End communications systems test experience, conduct and/or support of design reviews, requirements verification, environmental testing, and test procedure analysis.
- Design of RF circuits such as tracking receiver
- Perform coordination tasks for RF systems and interface with other third parties and agencies (e.g. satellite modem integration) to provide system direction of design and business development efforts
- Perform radio frequency interference and compatibility analysis for space-based communication systems.
- Receive and interpret RFI/RFPs to break down requirements into architectural concepts.
- Work with antennas, antenna polarization, power spectral density & spectral roll-off, power flux density, noise density, DVB-S2 standards
- Perform analysis and simulations using software’s such as MatLab, Simulink or Python

Experience

- Master’s Degree in telecommunication, electronics or comparable discipline + 5 years industry experience or Bachelor’s Degree in a similar program + 8 years industry experience
- Excellent technical understanding of satellite RF systems or communication systems
- Possess knowledge of digital communications, RF system analysis, FEC coding, and communications engineering
- Excellent technical understanding of closed-loop satellite tracking methods such as sequential lobing, monopulse and step tracking.
• Excellent technical understanding of communication systems such as digital modulation schemes, signal detection, signal and interference analysis, baseband filtering

• Excellent technical understanding of System Engineering Processes, Best Practices and Requirements including System Analyses, Trade Studies, Risk & Risk Management, Specifications, Design Definitions, Verification & Test

• Active participation in communications subsystem integration test activities

• Systems engineering support in evaluating external systems specifications and design documentation.

• Provision of inputs to the project management staff as needed

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 interacting with a cross-functional and international technical team

• Experience with RF test instruments and setups such as VNA, spectrum analyzer, anechoic chamber, etc.

• Competency in programming with MATLAB or Python

• Knowledge of different communication standards like Bluetooth, WLAN, LTE, DVB-S2 etc. preferable

• Understanding of phased array theory and electronically steerable arrays is a plus

• Competency in using EM simulation tools like ADS, CST, HFSS, AWR is a plus

• Track record of generating innovative solutions, successful hardware releases (patents are a plus)

• Experience in design and implementation of active circuits is a plus

• Team member

Please send us relevant documents via e-mail: career@alcansystems.com