Job Opportunity: Modem Engineer

Celestia Satellite Test & Simulation BV (C-STS) provides innovative high-tech solutions to the international space community to support spacecraft development, Assembly Integration and Test (AIT) as well as post launch and operational services. C-STS operates from Noordwijk, The Netherlands.

What we do:
Our core activities include the design, development and support of high-complexity electronics-based systems. These include products for Satellite Simulation & Test (Electrical Ground Support Equipment), TTC & TM/TC Systems, Modems (RF and Optical) as well as Data Processing Systems.

For more information about our company, our products and activities have a look at our website: www.celestia-sts.com.

Who are we looking for:
We are looking for a **Modem Engineer** to strengthen our existing team of talented engineers. You will be responsible for cutting-edge engineering focusing on design, implementation and support of Modems used for the modulation, demodulation and signal processing of Satellite Communication links.
This role will include involvement in defining modem system architectures, DSP Algorithms and system operations from initial architectural design through to finished products as well as hands-on development and support both with C-STS engineers and customers.

He/she shall Analyse, Model, Design, Develop and Validate Modems that satisfy SATCOM requirements in terms of Performance and Quality and market demands for cost and development Time. Primarily he/she should be able to support both legacy and new modem designs throughout the complete project lifecycle.

What will be your challenges:

- Gathering system requirements, deriving and issuing specifications
- Resolving system design trade-offs
- Interacting with system engineers, as well as VHDL and FPGA specialists and SW designers
- Organizing and handling Firmware outsourcing regarding Modem and FEC solutions
- Supporting TT&C and High Rate legacy products
- Supporting Verification and Validation Lab benches and procedures
- Preparing formal documentation for project or/and product-oriented activities
- Contributing to proposals regarding innovative Satellite Communications technologies
- Analysing, Modelling and Simulating DSP algorithms

What we ask from you:

- Electrical or Computer Engineering (Diploma, B.Eng., MSc, PhD)
- B. Eng degree +5 years of experience, or
- MSc/equivalent +3 years of experience, ~~or~~
- Telecommunications Theory and Signal Processing
- Digital Modulations schemes (e.g. GMSK, OQPSK, QPSK)
- English language skills (ability to communicate and work in English)
- Should be familiar in simulating VHDL using ModelSim or/and Active-HDL
- Implement in VHDL RTL following design rules and constraints for device, area and speed
- Good verbal and written communication skills in international project teams

Nice to have:

- Knowledge of ECSS, CCSDS, ITU, ETSI and relevant standards relating to modems

It is highly desirable that applicants are experienced in:

- Model-Based Design methodology and Simulation Tools (C, C++, Matlab, Simulink, etc.)
- HW/SW platform prototyping development
- FEC (trellis, convolutional codes, BCH codes, LDPC, turbo codes etc.)

We offer you the opportunity to:

- Work in a company that is widely recognised as 'best-in-class' in the fields in which it operates
- Work together with a bright team of like-minded people, consisting of hardware, firmware and (embedded) software engineers
- Work on challenging projects, growing your own skills and experiences along the way
- Work within the Space Industry and learn about satellite onboard equipment, such as the interfaces and protocols

For a practical and motivated individual, this position will offer an exciting challenge where you can contribute directly to the growth of this quality-driven, dynamic organization.

If you are interested, we welcome you to contact us via email: employment@celestia-sts.com.