



Expert in ultrasound imaging system modeling and simulation

About the company

Qplox specializes in product qualification and release. We offer consultancy and engineering services for test and lab automation, characterization, verification, validation and end of line test. For a wide range of products, and with special focus in High tech.

Our engineering department develops custom made test and automation systems, electronic prototypes and test benches. Our consultancy department offers our clients a complete solution for their high tech qualification needs. From RF, Photonics, semiconductors... our engineers can help in the qualification of all your advanced products.

Job Description

You will be a member of the qplox R&D team, and working for our customer in the region of Leuven. You will perform modeling and simulations in order to define the system architecture to enable target application (other tasks will be performed by other members in the team.)

- System activities:
 - State-of-the-Art study of SODAR-based fingerprint sensing
 - System performance modeling
 - Computation of basic transducer target performance for target resolution
 - Define resolution that can be achieved through a shielding layer, e.g. smartphone display.
 - What SNR is needed for the system?
 - Analog conditioning and ADC requirements
 - Include effects of the physical sensor and the medium
 - Include ASIC non-idealities
 - Building block definition and specification
 - Comparison of beam forming approaches (2D, MIMO, synthetic aperture, ...)
 - High level ASIC architecture (low power)
- Outcome/Deliverables:
 - Report on modeling activities + Matlab/C simulation models
 - High level ASIC architecture, including power consumption assessment

Candidate Description

You have at least a Bachelor's degree or other equivalent training in mechanical engineering, industrial engineering, or other related disciplines with at least 5 years of professional in imaging systems and expertise in

- beamforming systems
- radar/SODAR & sensing system
- signal processing
- Tools: Matlab and/or C
- You have experience working in an R&D environment
- You are a team player.
- You are fluent in English and have excellent communication skills.

Key Words

Radar, modeling, simulation, C, Matlab, SODAR, ultrasound, imaging

We offer

Your performance and growth is monitored, assessed and rewarded, you will have an individual development plan based on your competences and interests. We offer an attractive salary package with extra-legal benefits. A high tech, multicultural and young company with fast promotion and many learning possibilities in a growing, multidisciplinary company.

Contact

Send your CV to jobs@qplox.com or surf to www.qplox.com

WANTED