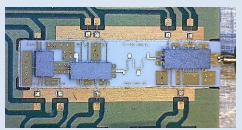


# SONY



Our Stuttgart Technology Center is the biggest Sony research center outside of Japan, where we develop innovations and core technologies for future generations of products to meet the requirements and needs of worldwide markets and customers.

The RF-Devices team in the European Technology Center (EuTEC) focuses on technology innovations, research and development of the physical layer in next generation broadcast / broadband communication systems and advanced millimeter wave sensors & radar systems. The research results will define the core technologies for future products and new business opportunities for Sony.

We are currently seeking for a skilled

# Research Engineer (m/f) Signal processing and algorithms for RADAR and Fusion Systems

# Forschungs-Ingenieur (m/w) Signalverarbeitung für Radardaten und Fusionsalgorithmen

This work is conducted in the European R&D center of Sony Europe Ltd. in Stuttgart/Germany.

#### Tasks

- Scientific research & conceptual engineering in the area of modern multi-channel electronic beamforming mm-wave radar systems, specifically short range imaging radar sensing systems and automotive radar sensors.
- Algorithm research and development for improved radar resolution, detection performance, robustness and joint
  processing towards multi-mode fusion engines simulation (MATLAB) and documentation/presentation of the results.
- Contributions to experimental verification platforms, realtime testing and optimization of systems and algorithms

### Aufgaben

- Forschung und Konzeptentwicklung für mehrkanalige mm-Wellen Radarsysteme mit elektronischer Strahlformung. Die Applikation reichen von bildgebenden Radarsensoren für kurze Distanzen bis hin zu automobilen Anwendungen.
- Architektur- und Algorithmen-Entwicklung zur Verbesserung der Auflösung, Detektionsgüte, Assoziation, Tracking,
   .....und Signalverarbeitung für multi-modale Fusionssysteme mit Hilfe von Simulationen (MATLAB).
- Beiträge zu Demonstratoren und HW-Aufbauten zur Algorithmen-Verifikation und Optimierung.

### We offer

- The opportunity to work in an international team with diverse expertise ranging from advanced RF to signal processing for heterogeneous sensor systems.
- The chance to apply your skills to state-of-the art signal processing and novel Radar R&D topics.
- The opportunity to shape and create the development of a new technologies and innovative business opportunities

## Skills required

- Diploma degree or PhD in the areas of digital signals processing, communications technologies or applied mathematics. Professional experience (i.e. in industry or University/Institutional R&D) and hands-on experience in radar signal processing or fusion signal processing is an advantage.
- Strong analytical skills and good theoretical understanding of modern radar signal processing methods ability to apply theoretical knowledge to scientific and engineering challenges.
- Familiar with radar signal processing & algorithms aiming at multi-sensor fusion.
- Demonstrated experience in modeling of systems and algorithms using state-of-the-art simulation tools such as MATLAB. Hands-on experience in testbed integration is an advantage.
- Self-motivation, flexibility and ability to learn and apply knowledge in new areas of technology.
- Interest in working in an international team and good English language skills (written and spoken).

We are looking forward to receiving your application. Please send your application to:

Sibila Atanasova
Talent & Resourcing Specialist
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