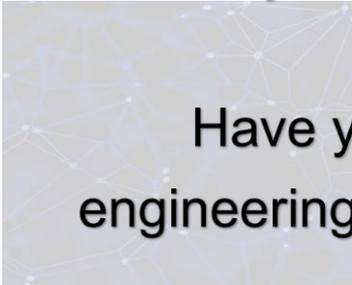


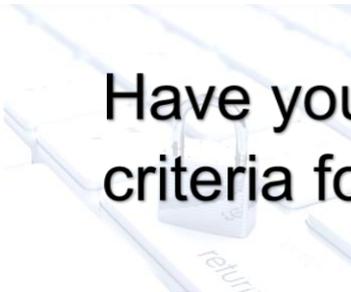
DE0305 Functional Safety for Systems Incorporating AI



Have you ever asked yourself how to develop a system incorporating machine learning approaches **AND** complying with functional safety standards efficiently?



Have you ever wondered why data engineering is crucial for safe systems?



Have you ever thought about acceptance criteria for your artificial intelligence?



Have you ever asked yourself which standards to apply for safety-related Machine Learning?



Join our training and learn more about **Functional Safety for Systems incorporating AI**

Agenda and Content

AI Basics and Key Safety Techniques

- ◆ Basics
 - Introduction to Functional Safety
 - Introduction to AI and Machine Learning
- ◆ Standards related to AI
 - Key aspects
 - Requirements for claiming Compliance to Safety Standards
- ◆ Machine Learning Concepts and Algorithms
 - Overview of Machine Learning Algorithms
 - Learning Processes
 - Segmentation and Classification
 - Specialities of Neural Networks and Deep Learning
 - Performance Metrics
- ◆ Key Techniques to handle Functional Safety and AI
 - Machine Learning Development Lifecycle
 - Data Engineering Techniques
 - Architectural Design Aspects
 - Explainability and Interpretable Decisions
 - Mathematical Modelling Approaches
 - Derivation and Definition of Acceptance Criteria
 - Safety Analyses
 - Failure Modes and Safety Mechanisms

Hands-On Workshop

- ◆ Introduction to Development and Test Tools
- ◆ Guided and interactive workshop on selected examples incorporating the safety basics presented during the training

Who should attend?

- ◆ Safety Managers
- ◆ Quality Managers
- ◆ Risk Managers
- ◆ Engineers who are interested in a comprehensive overview of ensuring the trustworthiness of systems incorporating AI

Prerequisites:

- Basic Programming Skills
- Basic knowledge of Functional Safety and Machine Learning is beneficial but not required

Duration: 2 days

50 % focus on AI Basics and Key Safety Techniques
50 % hands-on Workshop

Language: English or German in agreement with the participants.

Training Material: The training material will be in English.

The python examples presented in the hands-on workshop will be shared for your own experiments.

Location:

- *exida.com* GmbH office or
- online or
- on-site on customer request

Certificate: Each participant gets a confirmation of attendance also listing all the covered topics

For more information, please contact:

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