AICCI AI Practitioner

3-day intensive training with certification option (AICCI)

The **AI Practitioner** training is aimed at technical professionals who want to design, train, and deploy AI models in practice. From the basics of modern machine learning architectures to best practices for deployment and monitoring, this training provides hands-on insights into building AI systems with common tools and frameworks.

Target Audience

This course is designed for current and aspiring AI officers and AI compliance officers, AI coordinators and managers, as well as employees responsible for implementing or operating an AI management system. It also addresses professionals and executives who want to establish a legally compliant and responsible use of AI.

Prerequisites

Participation does not require any specific prerequisites.

Recommended: Basic knowledge in data analysis and understanding of fundamental IT and software concepts.

Attending the AICCI AI Foundation beforehand will make it easier to get started.

Language
German or English

Format
Online or in-house (on request)

Certification (optional)
AICCI
"AI Practitioner"

AICCI

Module 1 - Overview of AI technologies and application architectures
- ✓ Classification: traditional AI, machine learning, deep learning, generative AI
- ✓ Typical architectural components of AI systems
- ✓ Overview of common AI frameworks and platforms (without coding exercises)
- ✓ Criteria for tool selection based on project requirements

Module 2 - Data as the foundation of AI
- ✓ Data types and sources (structured and unstructured)
- ✓ Basics of data preparation (cleaning, labeling, transformation)
- ✓ Data quality and data governance
- ✓ Ethical aspects and data protection in data usage

Module 3 - Model types and selection criteria
- ✓ Supervised, unsupervised, and reinforcement learning - conceptual comparison
- ✓ Overview of common model families (decision trees, linear models, neural networks, transformers)
- ✓ Selecting suitable models for specific use cases
- ✓ Trade-offs: accuracy, computational effort, interpretability

Module 4 - Generative AI in practice
- ✓ Basics of generative models (text, image, audio, video)
- ✓ Prompt engineering as a strategic tool
- ✓ Integration of LLMs into applications via APIs (conceptual)
- ✓ Typical use cases and limitations

Module 5 -Testing, validating, and optimizing
- ✓ Evaluation metrics for AI models (accuracy, precision, recall, F1-score) - explained conceptually
- ✓ Avoiding overfitting and bias
- ✓ Iterative improvement process
- ✓ Documentation and traceability

Module 6 - Deployment and operations
- ✓ Transitioning from prototype to production system
- ✓ Integration into existing IT environments (conceptual overview)
- ✓ Monitoring and maintaining AI models
- ✓ Managing model aging (model drift)

Practical Workshop
- ✓ Three hands-on exercises
- ✓ Discussion session

Exam preparation
- ✓ Sample exam

Bactrya

Upcoming dates and further information can be found here:
https://www.bactrya.com/trainings/aicci-ai-practitioner