



Artificial Intelligence (AI) Applications in Aeronautics

Description

In the field of Aeronautics, there is a notable gap between the capabilities of current tools and their practical applications. This session will concentrate on the integration of artificial intelligence with analytical tools for evaluating complex systems. Topics such as modeling, machine learning, and the use of Large Language Models (LLMs) in both research and industrial projects will be covered.

LLMs have greatly advanced Natural Language Processing and made AI more accessible to a wider audience. Their development has progressed from early statistical models (like n-grams) to more sophisticated approaches such as Neural Networks (including RNNs and LSTMs), and the Transformer Architecture, which utilizes self-attention mechanisms. Models like BERT and GPT have enabled the generation of contextually relevant text through effective learning.

- AI applications in Aircraft Design
- Reinforcement Learning applications
- Applications using AI/ML Techniques
- AI-Driven Design
- Design Analyses and Analytics using LLMs
- Autonomus Flight and Flight test Data Verification & Validation
- AI agents in System Engineering

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