

# Checklist for Artificial Intelligence - Machine Learning Software Development

## IDENTITY AND PURPOSE

- Has the AI/ML software development project defined its objectives and purpose?  
☐ YES / NO
- Are the objectives aligned with the requirements and architecture management process?  
☐ YES / NO
- Has the project planned a learning assurance process to ensure model accuracy and reliability?  
☐ YES / NO

## REQUIREMENTS AND ARCHITECTURE MANAGEMENT

- Have all requirements for the AI/ML constituent been prepared, refined, and prioritized?  
☐ YES / NO
- Are the requirements complete and free from ambiguities?  
☐ YES / NO
- Has a traditional flow-down of requirements been performed (e.g., from aircraft to system)?  
☐ YES / NO
- Have feature engineering and data labeling tasks been automated or made more efficient?  
☐ YES / NO

## PROPORTIONALITY OF GUIDANCE

- Have the AI Level and criticality of the item containing the ML model been assessed?  
☐ YES / NO
- Are the objectives modulated based on the AI Level and criticality?  
☐ YES / NO
- Has a proportionality check been performed to ensure alignment with the guidance?  
☐ YES / NO

## LEARNING ASSURANCE PROCESS PLANNING

- Has a plan for learning assurance (e.g., plan for learning aspects of certification) been developed?  
☐ YES / NO
- Are all objectives from Section C.3 addressed in the plan?  
☐ YES / NO
- Is the interface and compatibility with development assurance processes ensured?  
☐ YES / NO

## **MLOPS PRACTICES**

- Are methods for detecting and addressing model drift implemented?  
☐ YES / NO
- Have practices for ensuring the accuracy and reliability of the ML model been established?  
☐ YES / NO

Note: This checklist is generated based on the provided text and may not cover all aspects of AI/ML software development.