

Here is the generated checklist for the author and reviewer:

Data Management

- Are data management requirements captured?
 - ☐ [] Yes
 - ☐ [] No
- Is data collected as part of the data management process?
 - ☐ [] Yes
 - ☐ [] No
- Are data sets labeled (only in supervised learning)?
 - ☐ [] Yes
 - ☐ [] No
- Is data preparation (pre-processing, transformation, and feature engineering) performed?
 - ☐ [] Yes
 - ☐ [] No
- Are the various data sets used in the learning phase identified (training, validation, test data sets)?
 - ☐ [] Yes
 - ☐ [] No
- Is data set verification (accuracy, completeness, representativeness) conducted with respect to ML requirements and AI/ML constituent ODD?
 - ☐ [] Yes
 - ☐ [] No
- Are independence requirements between data sets ensured?
 - ☐ [] Yes
 - ☐ [] No
- Are unwanted biases in the data sets identified and eliminated?
 - ☐ [] Yes
 - ☐ [] No

Configuration Management

- Is configuration management applied to AI/ML constituent lifecycle data?
 - ☐ [] Yes
 - ☐ [] No
- Are configuration items identified?

- ☐ [] Yes
- ☐ [] No

- Is versioning used for AI/ML constituent lifecycle data?

- ☐ [] Yes
- ☐ [] No

- Is baselining performed for AI/ML constituent lifecycle data?

- ☐ [] Yes
- ☐ [] No

- Is change control implemented for AI/ML constituent lifecycle data?

- ☐ [] Yes
- ☐ [] No

- Is reproducibility ensured for AI/ML constituent lifecycle data?

- ☐ [] Yes
- ☐ [] No

- Are problem reports generated for AI/ML constituent lifecycle data?

- ☐ [] Yes
- ☐ [] No

- Are archived and retrieved copies of AI/ML constituent lifecycle data retained?

- ☐ [] Yes
- ☐ [] No

Quality and Process Assurance

- Is quality assurance applied to the development of the AI-based system?

- ☐ [] Yes
- ☐ [] No

- Is process assurance ensured for the development of the AI-based system?

- ☐ [] Yes
- ☐ [] No

Reuse of AI/ML Models

- Are already trained ML models reused in the design of an AI/ML constituent?

- ☐ [] Yes
- ☐ [] No

- Is OD and/or ODD adaptation performed when reusing ML models?

- ☐ [] Yes
- ☐ [] No

- Is data quality ensured for reused ML models?

☐ [] Yes
☐ [] No

- Are change management processes implemented for reused ML models?

☐ [] Yes
☐ [] No

- Is development explainability ensured when reusing ML models?

☐ [] Yes
☐ [] No

- Is scalability ensured when reusing ML models?

☐ [] Yes
☐ [] No