

Modular ontologies for maintenance texts



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: Maintenance work orders, equipment rebuild reports, investigations, maintenance procedures, and equipment manuals are a vast resource for equipment manufacturers and asset operators. Recent developments in annotation and the use of deep learning by the NLP-TLP group at UWA are unlocking information captured in these texts enabling entity typing of instance data and the creation of knowledge graphs (KG). We now have 10,000s of maintenance work order and procedure documents and while we can query them, once in KG format using Cypher, we seek to augment our queries with reasoning based on engineering knowledge. This talk describes the annotation and KG pipelines and provides an overview of two reference and five modular application ontologies for maintenance texts. The UWA NLP-TLP group works with both BFO/IOF and ISO 15926-14 top level ontologies.

[Presentation Link](#)