

**Doctoral School of Information and Biomedical Technologies
Polish Academy of Sciences (TIB PAN)**

SUBJECT:

Large language models supervision powered by common knowledge datasets

SUPERVISOR:

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DESCRIPTION:

LLM output explainability is considered a necessary and sometimes a sufficient condition in the discourse towards safe and ethical AI. The proposed topic is supposed to encompass a range of research activities with aim to develop algorithms that map text documents representations at various stages of DNN processing onto RDF knowledge graphs. Such mappings would in practice take a form of specialized neural networks, trained on commonly available “bilingual” corpora such as DBpedia. The successful mapping functions are enablers of LLM output veracity and coherence verification – either directly or with support of classical automated reasoners.

BIBLIOGRAPHY:

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- Qureshi, M. A., & Greene, D. (2019). EVE: explainable vector based embedding technique using Wikipedia. *Journal of Intelligent Information Systems*, 53, 137-165.