

# Master's Thesis Assignment



144936

Institut: Department of Computer Graphics and Multimedia (UPGM)  
Student: **Kočí Jan, Bc.**  
Programme: Information Technology and Artificial Intelligence  
Specialization: Cybersecurity  
Title: **Automated Truth Discovery**  
Category: Speech and Natural Language Processing  
Academic year: 2022/23

## Assignment:

1. Describe modern methods for automatic verification of document reliability and discuss their possible use in natural language processing tasks.
2. Choose or propose new methods for verifying the reliability of documents.
3. Describe the available datasets.
4. Implement and analyze selected methods.
5. Evaluate their quantitative and qualitative performance.
6. Analyze the biases and limitations that the selected best method suffers from.

## Literature:

- Li, Yaliang, et al. "A survey on truth discovery." *ACM Sigkdd Explorations Newsletter* 17.2 (2016): 1-16.
- Yang, Shuo, et al. "Unsupervised fake news detection on social media: A generative approach." *Proceedings of the AAAI conference on artificial intelligence*. Vol. 33. No. 01. 2019.
- Petroni, Fabio, et al. "Improving Wikipedia Verifiability with AI." *arXiv preprint arXiv:2207.06220* (2022).

Requirements for the semestral defence:  
items 1-3

Detailed formal requirements can be found at <https://www.fit.vut.cz/study/theses/>

Supervisor: **Fajčík Martin, Ing.**  
Head of Department: Černocký Jan, prof. Dr. Ing.  
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