

Master Thesis (m/f/d): Development of an Automated Fact-Checking Service with ML & NLP for COVID-19-related claims

Background

The COVID-19 pandemic has made it clear that fighting misinformation on the internet needs to be a top priority for modern societies. While this can be done by manual work, it is ideally done by accurate algorithms that can extract the claims and verify them against a common trusted knowledge base. The VERITAS project, which is a collaboration between *Fraunhofer FOKUS*, *Ubermetrics* and *Trustami*, aims to develop a multi-layered trust-scoring and fact-checking system with a pilot case focused on COVID-related information. This Thesis is part of the VERITAS project.

Potential Scope for the Thesis

- Create an **analysis** of the **literature** on the different methods and processes of automated fact-checking using machine learning and natural language processing (NLP)
- Develop a **knowledge corpus** of textual and numerical (such as CSV tables) documents.
- Develop a way to **score and find relevant documents** depending on the claim/query.
- Develop a **prototype of a claim-verification system** using a knowledge corpus and test it against some hand-crafted example cases (preferably in Python).
- The thesis can be written in **English or German**.

Your profile

- You are a student in a scientific or IT-related field.
- You have a good background in statistics, data science or quantitative methods.
- You have some experience in Software Development (Python is a plus).
- You have some first practical experience with machine learning (NLP is a plus).
- You are data-driven, self-motivated, and curious about learning new things.

Your benefits

- A great office in the heart of Berlin (incl. goodies such as a kitchen to cook lunch and free Mate)
- Work from wherever you want
- Possibly employed as a working student
- Work with a modern tech stack in a young and diverse Team
- Long-term opportunities in a growing business

About Trustami

Trustami is a technology startup in the heart of Berlin. Trustami offers online vendors to leverage their existing reputation and reviews and thus help to create trust in e-commerce. The company was founded by TU-Berlin graduates and post-docs and still employs some research products focused on using machine learning to create safer environments on the web. An example research project in cooperation with TU-Berlin is SOFIE, which aims to detect fake online reviews.

Betreuung: Trustami GmbH und Kim Fröhnel (k.froehnel@tu-berlin.de)

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Kontakt: abschlussarbeiten@ikm.tu-berlin.de