UNIVERSITY OF SOUTH FLORIDA

Major Research Area Paper Presentation

Textual Inference as a Cognitive Reasoning Process
by
Animesh Nighojkar

For the Ph.D. degree in Computer Science and Engineering

This interdisciplinary project builds on previous research that explores new methods for improving natural language processing tasks. In one study, an Adversarial Paraphrasing Task (APT) was developed to identify paraphrases that draw on the inferential properties of sentences, rather than just lexical and syntactic similarities. The resulting dataset was shown to improve the accuracy of paraphrase identification models. In another study, transformer-based language models (TLMs) were used to model human performance in the semantic fluency task (SFT), with promising results that suggest TLMs can identify individual differences in human cognitive-behavioral profiles. These previous studies provide a foundation for the current project, which aims to develop new ways of measuring text meaning by studying the inferential relationships between sentences through Type 1 and Type 2 reasoning processes.

Wednesday, April 19th 2023
12:00 PM
ENB 313

THE PUBLIC IS INVITED

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