

Reducing Complexity of Scientific Literature By Automated Simplification and Translation

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Abstract

Scientific literature encodes a wealth of knowledge relevant to various users. However, the complexity of scientific jargon makes it inaccessible to all but domain specialists. It would be helpful for different types of people to be able to get at least a gist of a paper. Biomedical practitioners often find it difficult to keep up with the information load; but even lay people would benefit from scientific information, for example to dispel medical misconceptions. Besides, in many countries, familiarity with English is limited, let alone scientific English, even among professionals. All this points to the need for simplified access to the scientific literature. We thus present an application aimed at solving this problem, which is capable of summarising scientific text in a way that is tailored to specific types of users, and in their native language. For this objective, we used an LLM that our system queries using user selected parameters. We conducted an informal evaluation of this prototype using a questionnaire in 3 different languages. We will present the architecture of the system as well as the results of our user evaluation. A live demo is possible.