**Hebrew Text Simplification using Machine Learning**

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People with low language skills, such as children and the linguistically challenged, face difficulties reading complex text. The Hebrew language's rich morphology presents unique challenges when creating an Automatic Text Simplification system (ATSs). To tackle these chellenges we present SimplHe, an ATSs that modifies Hebrew text to enhance readability and understandability by reducing complexity factors such as structure, length, and unfamiliar words using Machine Learning and Natural Language Processing in a structured pipeline which achieved a 39.2 SARI score on a novel dataset introduced in this study. This system, implemented as a web-plugin, may potentially aid people with language barriers.

**Keywords:** Text Simplification, ATS, NLP, Hebrew, summarization, pipeline, text readability, language model.