

The Effect of Specific Language Features on the Complexity of Systems for Automated Essay Scoring

Yoav Cohen, Anat Ben-Simon and Myra Hovav

National Institute for Testing and Evaluation, Jerusalem, Israel

Abstract

Automated essay scoring (AES) can be a reliable and efficient assessment procedure. AES is currently performed using three types of methods: those based on analysis of surface features of the text, those based on analysis of semantic space, and those based on natural language processing (NLP). Each type of method is sensitive, to a certain extent, to specific language features that tend to vary widely across languages. The current paper examines the effect that such differences may have on the complexity of AES systems developed to grade essays in a specific language. The above analysis is performed with respect to the various writing scales customarily used to assess writing products.