Switching to the Latin Alphabet in Kazakhstan: A Brief Overview of Character Recognition Methods

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Abstract : In this article, we address the problem of Kazakhstan's transition to the Latin alphabet. The transition process started in 2017 and is scheduled to be completed in 2025. In connection with these events, the problem of recognizing the characters of the new alphabet is raised. Well-known character recognition programs such as ABBYY FineReader, FormReader, MyScript Stylus did not recognize specific Kazakh letters that were used in Cyrillic. The author tries to give an assessment of the well-known method of character recognition that could be in demand as part of the country's transition to the Latin alphabet. Three methods of character recognition: template, structured, and feature-based, are considered through the algorithms of operation. At the end of the article, a general conclusion is made about the possibility of applying a certain method to a particular recognition process: for example, in the process of population census, recognition of typographic text in Latin, or recognition of photos of car numbers, store signs, etc.

Keywords : text detection, template method, recognition algorithm, structured method, feature method
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