

Pedagogic application of regular expressions

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Rule-based pattern matching can be performed automatically using a program harnessing regular expressions. Once patterns have been matched, a script can execute pre-determined tasks. A scripting language, such as JavaScript, can be used to colour, highlight, replace or comment on the target expressions. The pedagogical applications of pattern matching are numerous for teachers of EAP or ESP. Two online pattern-matching tools, namely a modality detector and an error detector, were created to familiarize learners with the genre of academic writing. The modality detector focuses on two aspects of academic register, namely probability (e.g. possibility, might) and approximation (e.g. approximately, almost). The error detector searches submitted texts for five types of errors found in a corpus of learner writing. In both web-based tools, colour and comments are used to provide feedback to the user. These tools can be used lockstep with whole classes or by individual learners working independently. In addition to discussing the drawbacks and benefits of each tool, demonstrations of classroom applications of these and other web-based tools harnessing regex will be given.