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# DISTRIBUTED PATTERN MATCHING USING FINITE AUTOMATA

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ABSTRACT

Here we study a family of distributed pattern matching problems: we compute all the occurrences of a pattern in a text, where the pattern and/or the text can be either "singular" (ordinary) strings or "multiple" ones (strings distributed in several lines). We examine several combinations of singular and multiple text/patterns. We construct nondeterministic finite automata (*NFA*) for these problems and show their simulation using the Shift-Or algorithm.

*Keywords:* pattern matching, automata, Shift-Or, Shift-And.

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