Year: 2006 | **Vol.: 68** | **Fasc.: 1-2**

Title: Union-free regular languages and 1-cycle-free-path-automata

Author(s): Benedek Nagy

In this paper, we analyze a subclass of the regular languages, namely the union-free regular languages. These languages can be given by regular expressions without the operation union. In a union-free language the words look like each other, each word contains the so-called "backbone" word of the language in scattered way. The family of special type of finite automata is investigated to recognize these languages. These automata are the 1-cycle-free-path-automata. In these class from each state there is exactly one cycle-free path going to the final state. We also have result about regular expressions with union describing union-free languages.

Address:
Benedek Nagy

E-mail: nbenedek@inf.unideb.hu