

THE CENTER FOR ADVANCED COMPUTER STUDIES

at

the University of Louisiana at Lafayette

Lafayette, Louisiana

Proudly announces a presentation

Dr. Alexander Meduna

*Professor of Computer Science
Brno University of Technology*

will give a presentation entitled

Jumping Finite Automata

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Abstract

The present talk discusses a new investigation area in automata theory - *jumping finite automata*. These automata work like classical finite automata except that they read input words discontinuously - that is, after reading a symbol, they can jump over some symbols within the words and continue their computation from there. The talk establishes several results concerning jumping finite automata in terms of commonly investigated areas of automata theory, such as closure properties. Most importantly, it achieves several results that demonstrate differences between jumping finite automata and classical finite automata. In its conclusion, the talk formulates several open problems and suggests future investigation areas.

The talk is based upon the author's latest monograph *Modern Language Models and Computation: Theory with Applications* (written along with his PhD student Ondrej Soukup), Springer, 2017.

DATE: FRIDAY, APRIL 27, 2018

TIME: 11:00 A.M. - 12:00 NOON

LOCATION: OLIVER, ROOM 112

Biography

Alexander Meduna is a theoretical computer scientist and expert on compiler design, formal languages and automata. He is a professor of Computer Science at the Brno University of Technology. Formerly, he taught theoretical computer science at various European and American universities, including the University of Missouri, where he spent a decade teaching advanced topics of formal language theory. He is the author of several books and over sixty papers related to the subject matter.

Meduna is also an artist, who is primarily interested in visual art. He had several exhibitions in the USA and Europe. He often performs poetry reading as well.

Please post and/or circulate.

April 25, 2018