Research outputs:

A separation between RLSLPs and LZ77
Research output: Research › peer-review › Journal article – Annual report year: 2018

Compressed and Practical Data Structures for Strings
Research output: Research › Ph.D. thesis – Annual report year: 2018

Compressed Communication Complexity of Longest Common Prefixes
Research output: Research › peer-review › Article in proceedings – Annual report year: 2018

Dynamic Relative Compression, Dynamic Partial Sums, and Substring Concatenation
Research output: Research › peer-review › Journal article – Annual report year: 2017

Finger Search in Grammar-Compressed Strings
Research output: Research › peer-review › Journal article – Annual report year: 2018

Fingerprints in compressed strings
Research output: Research › peer-review › Journal article – Annual report year: 2017

Subsequence automata with default transitions
Research output: Research › peer-review › Journal article – Annual report year: 2017

Compressed Subsequence Matching and Packed Tree Coloring
Research output: Research › peer-review › Journal article – Annual report year: 2015

Deterministic indexing for packed strings
Research output: Research › peer-review › Article in proceedings – Annual report year: 2017

Fast Dynamic Arrays
Research output: Research › peer-review › Article in proceedings – Annual report year: 2017

Immersive Algorithms: Better Visualization with Less Information
Research output: Research › peer-review › Article in proceedings – Annual report year: 2017

Lempel-Ziv Compression in a Sliding Window
Research output: Research › peer-review › Article in proceedings – Annual report year: 2017
Space-Efficient Re-Pair Compression
Research output: Research › peer-review › Article in proceedings – Annual report year: 2017

Succinct partial sums and fenwick trees
Research output: Research › peer-review › Article in proceedings – Annual report year: 2017

Tight bounds for top tree compression
Research output: Research › peer-review › Article in proceedings – Annual report year: 2017

Time-space trade-offs for lempel-ziv compressed indexing
Research output: Research › peer-review › Article in proceedings – Annual report year: 2017

Boxed Permutation Pattern Matching.
Research output: Research › peer-review › Article in proceedings – Annual report year: 2016

Dynamic Relative Compression, Dynamic Partial Sums, and Substring Concatenation
Research output: Research › peer-review › Article in proceedings – Annual report year: 2016

Finger Search in Grammar-Compressed Strings
Research output: Research › peer-review › Article in proceedings – Annual report year: 2016

Longest common extensions in trees.
Research output: Research › peer-review › Journal article – Annual report year: 2016

Sparse Text Indexing in Small Space
Research output: Research › peer-review › Journal article – Annual report year: 2016

Subsequence Automata with Default Transitions
Research output: Research › peer-review › Article in proceedings – Annual report year: 2016

Algorithms and data structures for grammar-compressed strings
Research output: Research › Ph.D. thesis – Annual report year: 2015

Algorithms and Data Structures for Strings, Points and Integers: or, Points about Strings and Strings about Points
Research output: Research › Ph.D. thesis – Annual report year: 2015

Compressed Data Structures for Range Searching
Research output: Research › peer-review › Article in proceedings – Annual report year: 2015

Longest Common Extensions in Sublinear Space
Research output: Research › peer-review › Article in proceedings – Annual report year: 2015

Longest Common Extensions in Trees
Research output: Research › peer-review › Article in proceedings – Annual report year: 2015

On Regular Expression Matching and Deterministic Finite Automata
Research output: Research › peer-review › Comment/debate – Annual report year: 2015

Random Access to Grammar-Compressed Strings and Trees
Research output: Research › peer-review › Journal article – Annual report year: 2015
Topics in combinatorial pattern matching
Research output: Research › Ph.D. thesis – Annual report year: 2015

Tree compression with top trees
Research output: Research › Journal article – Annual report year: 2015

Compact q-gram profiling of compressed strings
Research output: Research › Journal article – Annual report year: 2014

Compressed Subsequence Matching and Packed Tree Coloring
Research output: Research › Article in proceedings – Annual report year: 2014

Indexing Motion Detection Data for Surveillance Video
Research output: Research › Article in proceedings – Annual report year: 2015

String Indexing for Patterns with Wildcards
Research output: Research › Journal article – Annual report year: 2014

Substring Range Reporting
Research output: Research › Journal article – Annual report year: 2014

Time–space trade-offs for longest common extensions
Research output: Research › Journal article – Annual report year: 2014

Towards optimal packed string matching
Research output: Research › Journal article – Annual report year: 2014

Compact q-gram Profiling of Compressed Strings
Research output: Research › Article in proceedings – Annual report year: 2013

Fingerprints in Compressed Strings
Research output: Research › Article in proceedings – Annual report year: 2013

Sparse suffix tree construction in small space
Research output: Research › Article in proceedings – Annual report year: 2013

Tree compression with top trees
Research output: Research › Article in proceedings – Annual report year: 2013

Fast and Cache-Oblivious Dynamic Programming with Local Dependencies
Research output: Research › Article in proceedings – Annual report year: 2012

Fast Arc-Annotated Subsequence Matching in Linear Space
Research output: Research › Journal article – Annual report year: 2012

Faster Approximate String Matching for Short Patterns
Research output: Research › Journal article – Annual report year: 2012

Longest Common Extensions via Fingerprinting
Research output: Research › Article in proceedings – Annual report year: 2012
String Indexing for Patterns With Wildcards
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

String matching with variable length gaps
Research output: Research - peer-review › Journal article – Annual report year: 2012

Time-Space Trade-offs for Longest Common Extensions
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Fast searching in packed strings
Research output: Research - peer-review › Journal article – Annual report year: 2011

Optimal Packed String Matching
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Random Access to Grammar-Compressed Strings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Substring Range Reporting
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

The Tree Inclusion Problem: In Linear Space and Faster
Research output: Research - peer-review › Journal article – Annual report year: 2011

Fast Arc-Annotated Subsequence Matching in Linear Space
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Regular Expression Matching with Multi-Strings and Intervals
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

String Matching with Variable Length Gaps
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Faster Regular Expression Matching
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Fast Searching in Packed Strings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Projects:

Differential Privacy and Approximation Algorithms
Project: PhD

Compressed Computation on Structured Data
Project: PhD

Algorithms for Compressed Computation
Project: PhD
Bridging the Gap Between Theory and Practice in Nature-inspired algorithms
Project: PhD

Matching and Compression of Strings with Automata and Word Packing
Project: PhD

Algorithms for Metadata
Project: PhD

Design Methods for Droplet-Based Microfluidic Biochips with Operation Variability
Project: PhD

Fast Approximate Tree Pattern Matching
Project: PhD

Approximate Text Indexing and String Matching Algorithms
Project: PhD