ALENEX18 – List of Accepted Papers

Paper titles and author information appears as submitted to Easy Chair.

**Paper title and author changes will not be made to this document.
The online program will reflect the most up-to-date presentation details, and is scheduled for
posting in November (http://www.siam.org/meetings/alenex18/program.php).**

Michael Mitzenmacher, Salvatore Pontarelli and Pedro Revriiego
Adaptive Cuckoo Filters: Reducing False Positive Rates for Network Applications

David Eppstein, Sariel Har-Peled and Gabriel Nivasch
Grid peeling and the affine curve-shortening flow

Maximilian Katzmann, Thomas Bläsius, Tobias Friedrich and Anton Krohmer
Hyperbolic Embeddings for Near-Optimal Greedy Routing

Elisabetta Bergamini, Tanya Gonser and Henning Meyerhenke
Scaling up Group Closeness Maximization

Monika Henzinger, Alexander Noe, Christian Schulz and Darren Strash
Practical Minimum Cut Algorithms

Demian Hespe, Christian Schulz and Darren Strash
Scalable Kernelization for Maximum Independent Sets

Thomas Mendel
Area-Preserving Subdivision Simplification with Topology Constraints: Exactly and in Practice

Marcel Radermacher, Klara Reichard, Ignaz Rutter and Dorothea Wagner
A Geometric Heuristic for Rectilinear Crossing Minimization

Kyle Kloster, Philipp Kuinke, Michael O'Brien, Felix Reidl, Fernando Sanchez Villaamil, Blair
Sullivan and Andrew van der Poel
A practical fpt algorithm for Flow Decomposition and transcript assembly

Patrick Bisenius, Elisabetta Bergamini, Eugenio Angriman and Henning Meyerhenke
Computing Top-k Closeness Centrality in Fully-dynamic Graphs

Jakob Lykke Andersen and Daniel Merkle
A Generic Framework for Engineering Graph Canonicalization Algorithms

Petteri Kaski
Engineering a delegatable and error-tolerant algorithm for counting small subgraphs

Johannes Fischer, Florian Kurpicz and Marvin Löbel
Simple, Fast and Lightweight Parallel Wavelet Tree Construction

Lars Arge, Yujin Shin and Constantinos Tsirogiannis
Computing Floods Caused by Non-Uniform Sea-Level Rise

Hector Ferrada, Simon Puglisi and Dominik Kempa
Hybrid Indexing Revisited

Loukas Georgiadis, Giuseppe F. Italiano, Aikaterini Karanasiou, Nikos Parotsidis and Nilakantha Paudel
Computing 2-Connected Components and Maximal 2-Connected Subgraphs in Directed Graphs: An Experimental Study

Nirman Kumar and Stavros Sintos
Faster Approximation Algorithm for the k-Regret Minimizing Set and Related Problems

Juan José Besa Vial, William E. Devanny, David Eppstein, Michael T. Goodrich and Timothy Johnson
Quadratic Time Algorithms Appear to be Optimal for Sorting Evolving Data

Marc Hellmuth, Anders Knudsen, Michal Kotrbcik, Daniel Merkle and Nikolai Nøjgaard
Linear Time Canonicalization and Enumeration of Non-Isomorphic 1-Face Embeddings