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CV

Min forskning omhandler teoretisk datalogi, navnlig algoritmer. Min oprindelige forskningsområde var datastrukturer, men i de sidste år er fokus skiftet til kombinatorisk optimering («algoritmer for hårde problemer», om man vil). De fleste af mine seneste resultater er inden for eksponentialtidsalgoritmer.

Publikationer

Modular Counting of Subgraphs: Matchings, Matching-Splittable Graphs, and Paths

Curticapean, R.-C., Dell, H. & Husfeldt, T., 2021, *Proceedings of the 29th Annual European Symposium on Algorithms*. Schloss Dagstuhl--Leibniz-Zentrum für Informatik, Bind 204. 17 s. 34

Om frihet är målet behövs en plan för hur ett samhälle utan arbete ska organiseras

Husfeldt, T. & Häggström, O., 19 nov. 2018, I: *Sydsvenska Dagbladet*. s. A3 1 s.

Counting Connected Subgraphs with Maximum-Degree-Aware Sieving

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2018, *29th International Symposium on Algorithms and Computation, ISAAC 2018, December 16-19, 2018, Jiaoxi, Yilan, Taiwan..* Schloss Dagstuhl--Leibniz-Zentrum für Informatik, Bind 123. s. 17:1-17:12 12 s. 17. (Leibniz International Proceedings in Informatics).

Counting Shortest Two Disjoint Paths in Cubic Planar Graphs with an NC Algorithm

Björklund, A. & Husfeldt, T., 2018, *29th International Symposium on Algorithms and Computation (ISAAC 2018)*. Schloss Dagstuhl--Leibniz-Zentrum für Informatik, Bind 123. s. 19:1-19:13 13 s. (Leibniz International Proceedings in Informatics).

Extensor-coding

Brand, C., Dell, H. & Husfeldt, T., 2018, *Proceedings of the 50th Annual ACM SIGACT Symposium on Theory of Computing: STOC 2018*. Association for Computing Machinery, s. 151 164 s.

Valid, scalable, authentic, on-site, digital, individual assessment of programming skills

Husfeldt, T., 2018, *LTHs 10:e Pedagogiska Inspirationskonferens, 6 december 2018*. Lunds Universitet, s. 21 23 s.

Valhemligheten bör inte vara valfri

Husfeldt, T., 25 maj 2015, I: *Dagens Samhälle*.

Graph Colouring Algorithms

Husfeldt, T., maj 2015, *Topics in Chromatic Graph Theory*. Beineke, L. W. & Wilson, R. J. (red.). Cambridge University Press, s. 277-303 (Encyclopedia of Mathematics and Its Applications; Nr. 156).

Exact Graph Coloring Using Inclusion-Exclusion

Björklund, A. & Husfeldt, T., 13 feb. 2015, *Encyclopedia of Algorithms*. Ming-Yang, K. (red.). Springer, s. 1-2 2 s.

Monstret i Turings bibliotek

Husfeldt, T., 2015, I: *Filosofisk Tidskrift*. 4

The Parity of Set Systems under Random Restrictions with Applications to Exponential Time Problems

Björklund, A., Dell, H. & Husfeldt, T., 2015, *Proceedings of the 42nd International Colloquium on Automata, Languages, and Programming, ICALP 2015, (6-10 July 2015, Kyoto, Japan)*. Springer, s. 231-242 12 s. (Lecture Notes in Computer Science, Bind 9134).

Den personlige virkelighed

Husfeldt, T., 4 jul. 2014, I: Weekendavisen. 27, 2 s.

Automata, Languages, and Programming: 41st International Colloquium, ICALP 2014, Copenhagen, Denmark, July 8-11, 2014, Proceedings, Part I

Esparza, J., Fraigniaud, P. (red.), Husfeldt, T. (red.) & Koutsoupias, E. (red.), 2014, Springer Science+Business Media. 1086 s. (Lecture Notes in Computer Science).

Automata, Languages, and Programming: 41st International Colloquium, ICALP 2014, Copenhagen, Denmark, July 8-11, 2014, Proceedings, Part II

Esparza, J. (red.), Fraigniaud, P., Husfeldt, T. & Koutsoupias, E., 2014, Springer Science+Business Media. 619 s. (Lecture Notes in Computer Science).

Exponential Time Complexity of the Permanent and the Tutte Polynomial

Dell, H., Husfeldt, T., Marx, D., Taslaman, N. S. & Wahlén, M., 2014, I: A C M Transactions on Algorithms. 10, 4, s. 21:1-21:32 32 s., 21.

Preface

Esparza, J., Fraigniaud, P., Husfeldt, T. & Koutsoupias, E., 2014, *Automata, Languages, and Programming: 41st International Colloquium, ICALP 2014, Copenhagen, Denmark, July 8-11, 2014, Proceedings, Part I*. Springer, Bind 8572. s. 5-6 2 s. (Lecture Notes in Computer Science, Bind 8572).

Shortest Two Disjoint Paths in Polynomial Time

Björklund, A. & Husfeldt, T., 2014, *Automata, Languages, and Programming: 41st International Colloquium, ICALP 2014, Copenhagen, Denmark, July 8-11, 2014, Proceedings, Part I*. 12 s. (Lecture Notes in Computer Science, Bind 8572).

Det vore fullt möjligt för politiken att främja sådana tekniker, istället för att sabotera dem

Husfeldt, T., Larsson, J. & Pagh, R., 14 nov. 2013, I: Sydsvenska Dagbladet Snällposten.

E-rösta är en dålig idé

Husfeldt, T., 28 apr. 2013, I: Sydsvenska Dagbladet Snällposten.

Exponential Algorithms: Algorithms and Complexity Beyond Polynomial Time: Dagstuhl Seminar 13331

Husfeldt, T., Paturi, R., Sorkin, G. B. & Williams, R., 2013, I: Dagstuhl Seminar Proceedings. 3, 8, s. 40-72 33 s.

The Parity of Directed Hamiltonian Cycles

Björklund, A. & Husfeldt, T., 2013, I: Symposium on Foundations of Computer Science. Annual Proceedings. s. 727-735

The traveling salesman problem in bounded degree graphs

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2012, I: A C M Transactions on Algorithms. 8, 2

Covering and packing in linear space

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2011, I: Information Processing Letters. 111, 21-22, s. 1033 3 s.

Invitation to algorithmic uses of inclusion–exclusion

Husfeldt, T., 2011, I: Lecture Notes in Computer Science. II, s. 42-59 17 s.

Covering and packing in linear space

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2010, *37th International Colloquium on Automata, Languages and Programming (ICALP 2010), Bordeaux, France, July 6-10, 2010*. Springer, Bind 6198. s. 727-737 (Lecture Notes in Computer Science).

Evaluation of permanents in rings and semirings

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2010, I: *Information Processing Letters*. 110, s. 867–870

Exponential time complexity of the permanent and the Tutte polynomial

Dell, H., Husfeldt, T. & Wahlén, M., 2010, *37th International Colloquium on Automata, Languages and Programming (ICALP 2010), Bordeaux, France, July 6-10, 2010*. Springer, Bind 6198. s. 426-437 (Lecture Notes in Computer Science).

The exponential time complexity of computing the probability that a graph is connected

Husfeldt, T. & Taslamán, N. S., 2010, *5th International Symposium on Parameterized and Exact Computation (IPEC 2010), December 13–15, 2010, Chennai, India*. Springer, (Lecture Notes in Computer Science).

Trimmed Moebius Inversion and Graphs of Bounded Degree

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2010, I: *Theory of Computing Systems*. 47, 3, s. 637-654

Counting paths and packings in halves

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2009, *17th Annual European Symposium on Algorithms*. Fiat, A. & Sanders, P. (red.). Springer, Bind 5757. s. 578–586 (Lecture Notes in Computer Science, Bind 5757).

Set partitioning via inclusion–exclusion

Björklund, A., Husfeldt, T. & Koivisto, M., 2009, I: *SIAM Journal on Computing*. 39, 2, s. 546-563

Computing the Tutte Polynomial in Vertex-Exponential Time

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2008, *2008 IEEE 49th Annual IEEE Symposium on Foundations of Computer Science (FOCS)*. IEEE Press, s. 677-686

Exact algorithms for exact satisfiability and number of perfect matchings

Björklund, A. & Husfeldt, T., 2008, I: *Algorithmica*. 52, 2, s. 226-249

The Travelling Salesman Problem in bounded degree graphs

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2008, *LNCS Automata, Languages and Programming: 35th International Colloquium, ICALP 2008, Reykjavik, Iceland, July 7-11, 2008, Proceedings, Part I*. Springer, s. 198–209 (Lecture Notes in Computer Science; Nr. 5125).

Trimmed Moebius inversion and graphs of bounded degree

Björklund, A., Husfeldt, T., Kaski, P. & Koivisto, M., 2008, *Proceedings of the 25th International Symposium on Theoretical Aspects of Computer Science Bordeaux, France, 2008*. Albers, S. & Weil, P. (red.). Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik GmbH, s. 85–96

Aktiviteter

The mathematics in The Hilbert Heartbreak Hotel

Thore Husfeldt (Foredragsholder)
28 mar. 2015

Projekter

BARC - Basic Algorithms Research Copenhagen

Pagh, R., Husfeldt, T. & Wyke, L.
01/09/2017 → 31/08/2024