Stanley M. Selkow Professor Emeritus Computer Science Department Worcester Polytechnic Institute Worcester, MA 01609 USA Telephone: (508)831-5449

Fax: (508)831-5776 email: sms@wpi.edu

WWW: http://www.cs.wpi.edu/~sms

PROFESSIONAL EXPERIENCE

9/80-present Professor Emeritus (2012-present),, Professor (1983-2012), Associate Professor (1980-1983) Computer Science Department, Worcester Polytechnic Institute, Worcester, MA

9/94-6/95 Visiting Professor, Département d'informatique, Université de Marne-la-Vallée, Noisy-le-Grand, France

5/86-12/86 Visiting Professor, Département de Mathématiques, Ecole Polytechnique Fédérale de Lausanne, Switzerland

6/83-8/83 Visiting Professor, Department of Computers and Automation, University of Chongqing, Chongqing, Szechuan, People's Republic of China

9/79-9/80 Visiting Associate Professor, Computer Science Department, Concordia University, Montreal, Canada

9/76-9/79 Associate Professor, Computer Science Department, University of Tennessee, Knoxville, TN

6/70-9/76 Associate Professor (1975-1976) Assistant Professor (1970-1975) Département d'Informatique, Université de Montréal, Montréal, Canada

6/68-6/70 Public Health Officer, National Institutes of Health, Bethesda, MD

EDUCATION

9/65-6/70 Ph.D., Computers and Information Sciences, 1970 M.S., Computers and Information Sciences, 1967 University of Pennsylvania, Philadelphia, PA

9/61-6/65 B.S., Electrical Engineering, 1965 Carnegie Institute of Technology, Pittsburgh, PA

PUBLICATIONS

- (with A. Gyárfás and G.N. Sárközy), "Coverings by few monochromatic pieces a transition between two Ramsey problems", to appear in Graphs and Combinatorics.
- (with G.N. Sárközy and F. Song), "" An Improved Bound for Vertex Partitions by Connected Monochromatic k-Regular Graphs", Journal of Graph Theory, 73:2, 2013, pp 127-145.
 - (with G.N. Sárközy and F. Song), "Vertex Partitions of Non-complete Graphs by Connected Monochromatic *k*-Regular Graphs", Discrete Mathematics. 311: 18-19(2011) pp. 2079-2084
 - (with A. Gyárfás, G.N. Sárközy and A. Sebő), "Ramsey-type results for Gallai colorings", Journal of Gaph Theory 64:3 (2010) pp 233-243.
 - (with G. Heineman and G. Pollice), "Algorithms in a Nutshell", O'Reilly (2008). Japanese Edition, 2010, Polish Edition, 2012.
 - (with G.N. Sárközy) "Distributing vertices along a Hamiltonian cycle in Dirac graphs", Discrete Mathematics 308:23 (2008) pp 5317-5898.
 - (with Z. Füredi, A. Gyárfás and G.N. Sárközy) "Inequalities for the first-fit chromatic number", Journal of Graph Theory 59:1 (2008) pp 75-88.
 - (with G.N. Sárközy) "On the anti-Ramsey problem of Burr, Erdős, Graham, and T. Sós", Journal of Graph Theory 52:2 (2006) pp 147-156.
 - (with G.N. Sárközy) "On a Turán-type hypergraph problem of Brown, Erdős and T. Sós, Discrete Mathematics 297:1-3 (2005) pp 190-195.
 - (with G.N. Sárközy) "An extension of the Ruzsa- Szemerédi Theorem", Combinatorica 25:1 (2005) pp. 77-84.
 - (with D. J. Dougherty) "The Complexity of the Certification of Properties of Stable Marriage", Information Processing Letters 92:6(2004) pp 275-277.
 - (with G.N. Sárközy) "On bipartite generalized Ramsey Theory", Ars Combinatoria 68(2003), pp. 57-64.
 - (with G.N. Sárközy) "An application of the Regularity Lemma in generalized Ramsey Theory", Journal of Graph Theory 44 (2003) pp. 39-49.

- (with G.N. Sárközy and E. Szemerédi) "On the number of Hamiltonian cycles in Dirac Graphs", Discrete Mathematics, 265/1-3 pp. 237 250 (2003). Also appeared as *Editors' Choice* in special volume online.
- (with G.N. Sárközy) "On Edge Colorings with at Least *q* Colors in Every Subset of *p* Vertices", Electronic Journal of Combinatorics R9, Volume 8(1) (2001).
- (with G.N. Sárközy) "Vertex Partitions by Connected *k*-regular Graphs", Journal of Combinatorial Theory B 78:1 (2000) pp. 115-122.
- (with H.A. Kierstead and G.N. Sárközy) "On *k*-ordered Hamiltonian Graphs", Journal of Graph Theory 32 (1999) pp. 17-25.
- (with A. Atkins and G.N. Sárközy) "Counting Irregular Multigraphs", Discrete Mathematics 195 (1999) pp. 235-237.
- "The Enumeration of Labeled Graphs by Number of Cutpoints", Discrete Mathematics 185 (1998) pp. 183-191.
- (with S. Taylor and N. Hachem), "The Average Height of a Node in the BANG Abstract Directory Tree", Information Processing Letters 61 (1997) pp. 55-61.
- (with C.A. Christen and G. Coray), "A Characterization of *n*-Component Graphs", Discrete Mathematics 149 (1996), pp. 279-281.
- "A Probabilistic Lower Bound on the Independence Number of Graphs", Discrete Mathematics 132 (1994), pp. 363-365.
- "The Independence Number of Graphs in Terms of Degrees", Discrete Mathematics 122 (1993), pp. 343-348.
- (with O. Murphy), "Finding Nearest Neighbors with Voronoi Tessellations", Information Processing Letters 34 (1990), pp. 37-41.
- (with O. Murphy), "The Complexity of Search Using k-d Trees for Finding Nearest Neighbors in Discrete Space", Information Processing Letters 23 (1986), pp. 215-218.
- (with A. Noetzel), "An Analysis of the General Tree Editing Problem", Time-Warps, Subsequences and Macromolecules (editors J. Kruskal and D. Sankoff), Addison-Wesley (1983), pp. 237-252.
- (with C. Hughes), "On the Finite-Power Property of Context-Free Languages", Journal of Theoretical Computer Science 15 (1981), pp. 111-114.
- (with R. Garfinkel), "On a Conjecture by Gould on the Parities of the Binomial

Coefficients", Fibonacci Quarterly 19 (1981), pp. 61-63.

(with L. Babai and P. Erdős), "Random Graph Isomorphism", SIAM Journal of Computing 9 (1980), pp. 628-635.

(with C. Christen), "Some Perfect Coloring Properties of Graphs", Journal of Combinatorial Theory B 27 (1979), pp. 49-59.

"New Bounds for the Clique Number of a Graph", Information Processing Letters 7 (1978), pp. 173-174.

"The Tree-to-Tree Editing Problem", Information Processing Letters 6 (1977), pp. 184-186.

(with G. Coray and A. Noetzel), "Order Independence in Local Clustering Algorithms", Computer Graphics and Image Processing 4 (1975), pp. 120-132.

(with L. Nastansky and N. Stewart), "An Improved Solution to the Generalized Camin-Sokal Model for Numerical Cladistics", Journal of Theoretical Biology 48 (1974), pp. 970-981.

"Diagnostic Keys as a Representation for Context in Pattern Recognition", IEEE Transactions on Electronic Computing 9 (1974), pp. 970-971.

(with L. Nastansky and N. Stewart), "Cost-Minimal Trees in Directed Acyclic Graphs", Zeitschrift for Operations Research 18 (1974), pp. 59-67.

(with L. Nastansky and N. Stewart), "The Enumeration of Minimal Phylograms", Bulletin of Mathematical Biology 35 (1973), pp. 525-533.

"One-Pass Complexity of Digital Picture Properties", Journal of the ACM 19 (1972), pp. 283-295.