

## **Published works (theoretical computer science, algorithm analysis)**

### **Book chapters:**

- [1] Kosowski A., Manuszewski K.: Classical Coloring of Graphs. In: *Graph Colorings*, Kubale M. ed., AMS Contemporary Math. 352 (2004), Providence, USA, 1-20.

### **Recent journal papers:**

- [2] Kosowski A., Navarra A., Pinotti M.C.: Exploiting Multi-Interface Networks: Connectivity and Cheapest Paths. To appear in: *Wireless Networks*, 2009.
- [3] Gavaille C., Klasing R., Kosowski A., Kuszner Ł., Navarra A.: On the Complexity of Distributed Graph Coloring with Local Minimality Constraints. To appear in: *Networks*, 2009.
- [4] Kosowski A.: Approximating the maximum 2- and 3-edge-colorable subgraph problems. To appear in: *Discrete Applied Mathematics*, 2009.
- [5] Furmańczyk H., Kosowski A., Ries B., Żyliński P.: Mixed graph edge coloring. *Discrete Mathematics* 309:12 (2009), 4027-4036.
- [6] Kosowski A.: A note on the strength and minimum color sum of bipartite graphs. *Discrete Applied Mathematics* 157:11 (2009), 2552-2554.
- [7] Fraigniaud P., Gavaille C., Kosowski A., Lebhar E., Lotker Z.: Universal Augmentation Schemes for Network Navigability. *Theoretical Computer Science* 410:21-23 (2009), 1970-1981.
- [8] Janczewski R., Kosowski A., Małafiejski M.: The complexity of the  $L(p,q)$ -labeling problem for bipartite planar graphs of small degree. *Discrete Mathematics* 309:10 (2009), 3270-3279.
- [9] Klasing R., Kosowski A., Navarra A.: Cost Minimisation in Wireless Networks with a Bounded and Unbounded Number of Interfaces. *Networks* 53:3 (2009), 266-275.
- [10] Kosowski A.: Forwarding and optical indices of a graph. *Discrete Applied Mathematics* 157:2 (2009), 321-329.
- [11] Kosowski A., Małafiejski M., Żyliński P.: Tighter bounds on the size of a maximum  $P_3$ -matching in a cubic graph. *Graphs and Combinatorics* 24:5 (2008), 461-468.
- [12] Kosowski A., Żyliński P.: Packing three-vertex paths in 2-connected cubic graphs. *Ars Combinatoria* 89 (2008), 19 pages.
- [13] Kosowski A.: The maximum edge-disjoint paths problem in complete graphs. *Theoretical Computer Science* 399:1-2 (2008), 128-140.
- [14] Furmańczyk H., Kosowski A., Żyliński P.: A note on mixed tree coloring. *Information Processing Letters* 106 (2008), 133-135.
- [15] Kosowski A., Małafiejski M., Żyliński P.: Packing  $[1,\Delta]$ -factors in graphs of small degree. *Journal of Combinatorial Optimization* 14:1 (2007), 63-86.
- [16] Kosowski A., Małafiejski M., Żyliński P.: Cooperative mobile guards in grids. *Computational Geometry: Theory and Applications* 37:2 (2007), 59-71.

- [17] Kosowski A., Małafiejski M., Żyliński P.: An Approximation Algorithm for Maximum  $P_3$ -packing in Subcubic Graphs. *Information Processing Letters* 99 (2006), 230-233.

### **Selected recent conference papers:**

- [18] Kosowski A., Navarra A.: Graph Decomposition for Improving Memoryless Periodic Exploration. To appear in: *Proc. MFCS'09*, LNCS, 2009.
- [19] C. Gavoille, A. Kosowski, M. Markiewicz: What Can be Observed Locally? Round-based Models for Quantum Distributed Computing. To appear in: *Proc. DISC'09*, LNCS, 2009.
- [20] E. Bampas, L. Gąsieniec, N. Hanusse, D. Ilcinkas, R. Klasing, A. Kosowski: Euler tour lock-in problem in the rotor-router. To appear in: *Proc. DISC'09*, LNCS, 2009.
- [21] Kolenderska A., Kosowski A., Małafiejski M., Żyliński P.: An Improved Strategy for Exploring a Grid Polygon. To appear in: *Proc. SIROCCO'09*, LNCS, 2009.
- [22] Cooper C., Ilcinkas D., Klasing R., Kosowski A.: Derandomizing Random Walks in Undirected Graphs Using Locally Fair Exploration Strategies. *Proc. ICALP'09*, LNCS 5556 (2009), 411-422.
- [23] Kosowski A., Navarra A., Pinotti M.C.: Connectivity in Multi-Interface Networks. *Proc. TGC'08*, LNCS 5474 (2009), 157-170.
- [24] Klasing R., Kosowski A., Navarra A.: Taking Advantage of Symmetries: Gathering of Asynchronous Oblivious Robots on a Ring. *Proc. OPODIS'08*, LNCS 5401 (2008), 446-462.
- [25] Fraigniaud P., Gavoille C., Kosowski A., Lebar E., Lotker Z.: Universal Augmentation Schemes for Network Navigability: Overcoming the  $\sqrt{n}$ -Barrier. *Proc. SPAA'07*, ACM (2007), 1-7. Some preliminary results were first announced in AlgoTel'07 abstracts.
- [26] Kosowski A., Navarra A.: Cost Minimisation in Unbounded Multi-Interface Networks. *Proc. PPAM'07*, LNCS 4967 (2008), 1039-1047.
- [27] Furmańczyk H., Kosowski A., Żyliński P.: Scheduling with Precedence Constraints: Mixed Graph Coloring in Series-Parallel Graphs. *Proc. PPAM'07*, LNCS 4967 (2008), 1001-1008.
- [28] Klasing R., Kosowski A., Navarra A.: Cost minimisation in multi-interface networks. *Proc. Net-Coop'07*, LNCS 4465 (2007), 276-285.
- [29] Gavoille C., Klasing R., Kosowski A., Navarra A., On the Complexity of Distributed Greedy Coloring. *Proc. DISC'07* (brief announcement), LNCS 4731 (2007), 482-484.
- [30] Kosowski A., Kuszner Ł., Energy Optimisation in Resilient Self-Stabilizing Processes. *Proc. PARELEC'06*, IEEE (2006), 105-110.
- [31] Kosowski A.: Approximation Strategies for Routing Edge Disjoint Paths in Complete Graphs. *Proc. SIROCCO'06*, LNCS 4056 (2006), 130-142.
- [32] Kosowski A., Kuszner Ł.: On Greedy Graph Coloring in the Distributed Model. *Proc. EuroPar'06*, LNCS 4128 (2006), 592-601.

- [33] Kosowski A., Kuszner Ł.: Self-stabilizing Algorithms for Graph Coloring with Improved Performance Guarantees. *Proc. ICAISC'06*, LNAI 4029 (2006), 1150-1159.
- [34] Kosowski A., Małafiejski M., Żyliński P.: An Efficient Algorithm for Mobile Guarded Guards in Simple Grids. *Proc. ICCSA'06*, LNCS 3988 (2006), 141-150. Some preliminary results were first announced in JCDCG'04 abstracts.
- [35] Kosowski A., Małafiejski M., Żyliński P.: Fault Tolerant Guarding of Grids. *Proc. ICCSA'06*, LNCS 3988 (2006), 161-170.
- [36] Kosowski A., Kuszner Ł.: A self-stabilizing algorithm for finding a spanning tree in a polynomial number of moves. *Proc. PPAM'05*, LNCS 3911 (2006), 75-82.
- [37] Kosowski A., Małafiejski M., Żyliński P.: Parallel processing subsystems with redundancy in a distributed environment. *Proc. PPAM'05*, LNCS 3911 (2006), 1002-1009.
- [38] Kosowski A., Małafiejski M., Żyliński P.: On bounded load routings for modeling  $k$ -regular connection topologies. *Proc. ISAAC'05*, LNCS 3827 (2005), 614-623.
- [39] Kosowski A., Małafiejski M., Żyliński P.: Packing three-vertex paths in a subcubic graph. *Proc. EUROCOMB'05*, Discrete Mathematics and Theoretical Computer Science AE (2005), 213-218.
- [40] Kosowski A.: An efficient algorithm for the longest tandem scattered subsequence problem. *Proc. SPIRE'04*, LNCS 3246 (2004), 93-100.

#### Other refereed papers:

- [41] Kosowski A., Kuszner Ł., A self-stabilizing algorithm for coloring bipartite graphs and cacti (in Polish). *Zeszyty Naukowe Politechniki Śląskiej* 1726 (2006), 75-81.
- [42] Aleksyńska A., Kosowski A., Małafiejski M., Identification of unknown terrain using a mobile robot (in Polish). *Zeszyty Naukowe Politechniki Śląskiej* 1726 (2006), 11-18.
- [43] Kosowski A., Kuszner Ł.: Some greedy graph coloring algorithms in the distributed model (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 10 (2006), 491-498.
- [44] Kosowski A.: Optical diameter colorings for chosen graph classes (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 6 (2005), 137-144.
- [45] Kosowski A.: Chosen properties of the optical routing and path coloring problem (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 4 (2004), 495-502.
- [46] Kosowski A.: Metaheuristic algorithms for the routing and path coloring problem (in Polish). In: *Automatyzacja Procesów Dyskretnych. Optymalizacja dyskretna*, Gessing R., Szkodny T. ed., WNT Warsaw (2004), 99-108.
- [47] Kosowski A., Kubale M.: Antipodal chromatic number of a graph (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 2 (2003), 487-494.
- [48] Kosowski A.: Sequential algorithms for antipodal graph coloring (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 2 (2003), 495-501.
- [49] Kubale M., Kosowski A.: Algorithms for radiocoloring a graph (in Polish). *Zeszyty Naukowe Politechniki Śląskiej* 1556 (2002), 133-144.

## **Published works (applications of computer science)**

### **Book chapters:**

- [50] Kosowski K., Kosowski A. et al.: Chapters 3, 5, 13. In: *Steam and Gas Turbines*, Kosowski K. ed., Alstom (2007), France-Switzerland-UK-Poland, 99-143 177-189 429-463.

### **Recent journal papers:**

- [51] Kosowski K., Tucki K., Kosowski A.: Application of Artificial Neural Networks in Investigations of Steam Turbine Cascades. *Journal of Turbomachinery* 131:3 (2009), to appear.
- [52] Kosowski K., Tucki K., Kosowski A.: Turbine Stage Design Aided by Artificial Intelligence Methods. *Expert Systems with Applications* 36:9 (2009), 11536-11542.

### **Recent conference papers:**

- [53] Kosowski A., Małafiejski M., Noiński T., Application of an online judge & contester system in academic tuition. *Proc. ICWL'07, LNCS 4823* (2008), 343-354.
- [54] Janczewski R., Kosowski A., Małafiejski M., Noiński T.: Co-management in the SPOJ system (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 8 (2006), 365-370.
- [55] Kosowski A., Małafiejski M., Noiński T., Pomykalski P.: A practical approach to securing an online judge web portal (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 7 (2005), 529-538.
- [56] Kosowski A., Małafiejski M., Noiński T., Pomykalski P.: An integrated system for the automated assessment of solutions to algorithmic problems applied in university tuition (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 7 (2005), 523-528.
- [57] Kosowski A., Małafiejski M., Noiński T.: Security aspects of the Sphere Online Judge system (in Polish). *Materiały XIII Konferencji Sieci i Systemy Informatyczne 1* (2005) 663-670.
- [58] Dąbrowski J. et al: A web-based online judge system (in Polish). *Materiały XIII Konferencji Sieci i Systemy Informatyczne 1* (2005) 633-638.
- [59] Fuszara M., Kosowski A.: Algorithmic strategies for combat units in the Robocode environment (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 5 (2004), 733-742.
- [60] Małafiejski M., Kosowski A., Fuszara M.: Outline of a new environment for simulation of autonomous military units (in Polish). *Zeszyty Naukowe WETI Politechniki Gdańskiej* 5 (2004), 755-764.