

LIST OF PUBLICATIONS

Last updated: February, 2008

THESES

1. A. Faragó, “Algorithmic Problems in Modern Telecommunication Networks and Services” (In Hungarian), Summary of Achievements for the Distinguished Degree “Doctor of the Hungarian Academy of Sciences”, Budapest, Hungary, Prepared in 1994.
2. A. Faragó, “Formal Description Methods of Networks of Automata” (In Hungarian), Ph.D. Dissertation, Technical University of Budapest, Hungary, 1981.
3. A. Faragó, “Stochastic Computers” (In Hungarian), M.Sc. Thesis, Technical University of Budapest, Hungary, 1976.

BOOKS AND CHAPTERS/SECTIONS IN BOOKS

4. A. Faragó, “Algorithmic Challenges in Ad Hoc Networks”, In: *Mobile Ad Hoc Networking*, Ed. by S. Basagni, M. Conti, S. Giordano and I. Stojmenovic, IEEE Press and Wiley-Interscience, 2004, pp. 427-445.
5. A. Faragó and V.R. Syrotiuk, “Medium Access Control (MAC) Protocols”, In: J. Proakis (Ed.), *Encyclopedia of Telecommunications*, John Wiley & Sons, 2002.
6. A. Faragó, “VP Network Design Using a Multicommodity Flow Model”, In: J. Roberts, U. Mocci, J. Virtamo (eds.): *Broadband Network Traffic*, Springer, 1996.
7. A. Faragó, “Capacity Partitioning among Multiple VP Networks”, In: J. Roberts, U. Mocci, J. Virtamo (eds.): *Broadband Network Traffic*, Springer, 1996.
8. A. Faragó, “Routing at Maximal Carried Traffic in a Logical Network”, In: J. Roberts, U. Mocci, J. Virtamo (eds.): *Broadband Network Traffic*, Springer, 1996.

9. G. B. Sülle, S. Csibi, Gy. Dallos, A. Faragó, G. Gordos L. Gyórfi, Z. Gyórfi, L. Osváth, A. Pálinszki, Gy. Podoletz, Cs. Szabó, (edited by S. Csibi), *Transmission and Processing of Information*, (in Hungarian), Hungarian Textbook Publisher, Budapest, 1986.

REFEREED JOURNALS

10. Chen Wang, Myung-Ah Park, James Willson Yongxi Cheng, András Faragó and Weili Wu, “On Approximate Optimal Dual Power Assignment for Biconnectivity and Edge-Biconnectivity”, accepted to *Theoretical Computer Science*.
11. A. Faragó, “Algorithmic Challenges in Learning Path Metrics from Observed Choices” accepted to *Applied Artificial Intelligence*.
12. A. Faragó, “A General Tractable Density Concept for Graphs” accepted to *Mathematics in Computer Science*.
13. A. Faragó, “On the Fundamental Limits of Topology Control in Ad Hoc Networks”, *Algorithmica*, 49(2007), pp. 337-356.
14. A. Faragó, “Efficient Blocking Probability Computation of Complex Traffic Flows for Network Dimensioning”, *Computers and Operations Research*, published online in Feb 2007 at the journal website: <http://dx.doi.org/10.1016/j.cor.2007.02.009>
15. N. Meghanathan and A. Faragó, “On the Stability of Paths, Steiner Trees and Connected Dominating Sets in Mobile Ad Hoc Networks”, *Ad Hoc Networks*, Elsevier, published online in July 2007 at the journal website: <http://www.sciencedirect.com/science/journal/15708705>
16. A. Faragó, “On the Typical Case Complexity of Graph Optimization” *Discrete Applied Mathematics*, Special Issue on Typical Case Complexity and Phase Transitions, Vol. 153, December 2005, pp. 73-88.
17. A. Faragó and V.R. Syrotiuk, “MERIT: A Scalable Approach for Protocol Assessment”, Invited paper, *Mobile Networks and Applications (MONET)*, Spec. Issue on Mobile Ad Hoc Networks, 8(2003), pp. 567-577.

18. A. Faragó, Á. Szentesi and B. Szviatovszki, “Inverse Optimization in High Speed Networks”, *Discrete Applied Mathematics*, Spec. Issue on Combinatorial and Algorithmic Aspects of Telecommunications, 129(2003), pp. 83-98.
19. G.O. Burnham, C.D. Cantrell, A. Faragó, A. Fumagalli, K. Kiasaleh, W.P. Osborne, R. Prakash, “The First Telecommunications Engineering Program in the United States”, *ASEE PRISM, Journal of the American Society for Engineering Education*, October 2001, pp. 653–657.
20. A. Faragó, A.D. Myers, V.R. Syrotiuk, and G. Záruba. “Meta-MAC Protocols: Automatic Combination of MAC Protocols to Optimize Performance for Unknown Conditions,” *IEEE Journal on Selected Areas in Communications*, Volume 18, Number 9, September 2000, pp. 1670–1681.
21. A. Magi, A. Szentesi, B. Szviatovszki, A. Faragó, “Dynamic Routing in ATM Networks”, *Journal on Communications*, Vol. 50, No. 11, November 1999, pp. 2-11.
22. I. Chlamtac and A. Faragó, “A New approach to the Design and Analysis of Peer-to-Peer Mobile Networks”, *Wireless Networks*, 5(1999/3), pp. 149-156.
23. I. Chlamtac, A. Faragó, H. Zhang and A. Fumagalli, “A Deterministic Approach to the End-to-End Analysis of Packet Flows in Connection Oriented Networks”, *IEEE/ACM Transactions on Networking*, 6(1998/4), pp. 422-431.
24. P. Bahl, I. Chlamtac and A. Faragó, “Resource Assignment For Integrated Services in Wireless ATM Networks”, *International Journal of Communication Systems*, Spec. Issue on Personal Communication Systems, 11(1998), pp. 29-41.
25. I. Chlamtac, A. Faragó and T. Zhang: “Time Spread Multiple Access (TSMA) Protocols for Multihop Mobile Radio Networks”, *IEEE/ACM Transactions on Networking*, 5(1997/6), pp. 804-812.

26. A. Faragó, J. Bíró, T. Henk and M. Boda, "Analog Neural Optimization for ATM Resource Management", *IEEE Journal on Selected Areas in Communications*, 15(1997/2), Special Issue on Computational and Artificial Intelligence in High Speed Networks, pp. 156-164.
27. K. Szarkowicz, G. Fodor, A. Faragó and T. Henk, "Simulative Analysis of Routing Strategies in Multicasting Multiservice Loss Networks", *Simulation*, January 1997, Special Issue on Modeling and Simulation of Computer Systems and Networks, pp. 34-43.
28. I. Chlamtac, A. Faragó and T. Zhang: "Lightpath (Wavelength) Routing in Large WDM Networks", *IEEE Journal on Selected Areas in Communications*, 14(1996/5), pp. 909-913.
29. A. Faragó, V.T. Hai, T. Cinkler, Z. Fekete and A. Arató, "An ATM Network Planning Model", *Journal on Communications*, Special Issue on ATM Networks I., 47(1996), pp. 13-16.
30. J. Bíró, Z. Koronkai, T. Trón, M. Boda, A. Faragó and T. Henk, "Neurocomputing in Logical Partitioning of ATM Networks", *Journal on Communications*, Special Issue on ATM Networks II., 47(1996), pp. 7-11.
31. A. Faragó, S. Blaabjerg, L. Ast, G. Gordos and T. Henk, "A New Degree of Freedom in ATM Network Dimensioning: Optimizing the Logical Configuration", *IEEE Journal on Selected Areas in Communications*, 13(1995/7), pp. 1199-1206.
32. A. Faragó, "On the Complexity of Finding Sparsest and Densest Parts in Wireless Networks", *Wireless Networks*, 1(1995/2), pp. 221-226.
33. S. Molnar, A. Faragó, T. Henk and S. Blaabjerg, "Towards Precision Tools for ATM Network Design, Dimensioning and Management", *Periodica Polytechnica (Electrical Engineering)*, 39(1995/1), pp. 37-51.
34. I. Chlamtac, A. Faragó and H.Y. Ahn, "A Topology Transparent Link Activation Protocol for Mobile CDMA Radio Networks", *IEEE Journal on Selected Areas in Communications*, 12(1994/8), pp. 1426-1433.

35. I. Chlamtac, A. Faragó, T. Zhang, “Optimizing the System of Virtual Paths”, *IEEE/ACM Transactions on Networking*, 2(1994/6), pp. 581-587.
36. I. Chlamtac and A. Faragó, “An Optimal Channel Access Protocol with Multiple Reception Capacity”, *IEEE Transactions on Computers*, 43(1994/4), pp. 480-484.
37. I. Chlamtac and A. Faragó, “Making Transmission Schedules Immune to Topology Changes in Multi-Hop Packet Radio Networks”, *IEEE/ACM Transactions on Networking*, 2(1994/1), pp. 23-29.
38. A. Faragó, T. Linder and G. Lugosi, “Fast Nearest Neighbor Search in Dissimilarity Spaces”, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 15(1993/9), pp. 957-962.
39. A. Faragó and G. Lugosi, “Strong Universal Consistency of Neural Network Classifiers”, *IEEE Transactions on Information Theory*, 39(1993/4), pp. 1146-1151.
40. A. Faragó, T. Linder and G. Lugosi, “Efficient Search in Dissimilarity Spaces for Automatic Speech Recognition”, *Journal on Communications* 43(1992), Special Issue on Speech Processing, pp. 26-29.
41. A. Faragó and G. Lugosi, “Parameter Estimation of Hidden Markov Processes in Isolated Word Recognition”, *Journal on Communications*, 43(1992), Special Issue on Speech Processing, pp. 30-31.
42. A. Faragó, T. Linder and G. Lugosi, “Nearest Neighbor Search and Classification in $O(1)$ Time”, *Problems of Control and Information Theory*, 20(1991/6), pp. 383-395.
43. A. Faragó and G. Lugosi, “An Algorithm to Find the Global Optimum of Left-to-Right Hidden Markov Model Parameters”, *Problems of Control and Information Theory*, 18(1989/6). pp. 435-444.
44. A. Faragó, T. Linder and G. Lugosi, “On the Algorithmic Problems of the Nearest Neighbor Classification Rule”, (in Hungarian), *Journal on Communications* 39(1988/8), pp. 337-341.

45. A. Faragó and I. Novák, “High Accuracy Frequency Determination from Discrete Spectra”, *Periodica Polytechnica*, 32(1988/2-4). pp. 121-127.
46. A. Faragó, G. Gordos, I. Koutny, G. Magyar and L. Osváth, “The Verbident-SD-2 Isolated Word Recognizer”, (in Hungarian), *Journal on Communications* 39(1988/3), pp. 111-115.

REFEREED CONFERENCES

47. A. Faragó, “Methods for Handling Non-Markovian Performance Models”, International Conference on Communications in Computing (CIC’07), Las Vegas, Nevada, June 25-28, 2007, pp. 97-103.
48. A. Faragó, “Random Graph Models and the Limits of Scalability in Ad Hoc and Sensor Networks”, International Workshop on Theoretical and Algorithmic Aspects of Sensor and Ad-hoc Networks (WTASA’07), Miami, Florida, June 28-29, 2007, pp. 1-12.
49. A. Faragó, “Sampling from Independence Systems”, International Conference on Foundations of Computer Science (FCS’07) Las Vegas, Nevada, June 25-28, 2007, pp. 27-33.
50. M.A. Park, W. Chen. J.K.V. Willson, M.T. Thai, W. Wu and A. Faragó, “A Dominating and Absorbent Set in Wireless Ad Hoc Networks with Different Transmission Ranges”, 8th ACM International Symposium on Mobile Ad Hoc Networking and Computing (Mobi-hoc’07), Montreal, Canada, September 9-14, 2007, pp. 22-31.
51. A. Faragó “Learning Path Metrics from Observed Choices”, International Conference on Machine Learning, Las Vegas, Nevada, June 25-28, 2007, pp. 163-169.
52. M.A. Park and A. Faragó, “Minimum Frequencies for the Virtual Maximum MAC Capacity in a Multi-Channel Ad-Hoc Network”, Third IEEE International Workshop on Performance and Management of Wireless and Mobile Networks (P2MNet’07), part of 32nd IEEE Conference on Local Computer Networks (LCN’07) Dublin, Ireland, October 15-18, 2007, pp. 725-730.

53. N. Meghanathan and A. Faragó, "Comparison of Routing Strategies for Minimizing Energy Consumption in Mobile Ad Hoc Networks", 4th Asian International Mobile Computing Conference (AMOC 2006), Kolkata, India, January 4-7, 2006.
54. A Faragó, "Towards the Integration of Reliability and Traffic Engineering", International Conference on Communications in Computing (CIC'06), Las Vegas, Nevada, June 26-29, 2006, pp. 28-34.
55. A Faragó, "On the Convergence Rate of Quasi Lumpable Markov Chains", 3rd European Performance Engineering Workshop (EPEW'06), Budapest, Hungary, June 21-22, 2006. Published in the Springer Series LNCS 4054, pp. 138-147.
56. A Faragó, "Speeding Up Markov Chain Monte Carlo Algorithms", International Conference on Foundations of Computer Science (FCS'06), Las Vegas, Nevada, June 26-29, 2006, pp. 102-108.
57. A Faragó, "A Graph Theoretic Model for Complex Network Failure Scenarios", 8th INFORMS Telecommunications Conference, Dallas, Texas, March 30 - April 1, 2006.
58. H. Wang and A. Faragó, "On-line Algorithm for Server Selection of Video Streaming over P2P Networks", International Conference on Communications in Computing (CIC'06), Las Vegas, Nevada, June 26-29,
59. A. Faragó, "New Analytical Results on Ad Hoc Network Connectivity", Third IASTED International Conference on Communications and Computer Networks (CCN 2005), Marina del Rey, CA, Oct 24-26, 2005, pp. 126-131.
60. A. Faragó, "Almost Surely Almost Exact Optimization in Random Graphs", International Conference on Foundations of Computer Science (FCS'05), Las Vegas, Nevada, June 27-30, 2005, pp. 94-100.
61. A. Faragó, "Finding Dense Subgraphs Efficiently", International Conference on Foundations of Computer Science (FCS'05), Las Vegas, Nevada, June 27-30, 2005, pp. 73-79.

62. N. Meghanathan and A. Faragó, "An Efficient Algorithm for the Optimal Number of Route Transitions in Mobile Ad Hoc Networks", *IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob'05)*, Montreal, Canada, August 22-24, 2005, pp. 41-48.
63. N. Meghanathan and A. Faragó, "On the Route Refresh Frequency for On-demand Maximum Battery Life Routing in Ad Hoc Networks," *IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob'05)*, Montreal, Canada, August 22-24, 2005, pp. 291-298.
64. N. Meghanathan and A. Faragó, "Maximizing Network Lifetime under Fixed Energy Budget in Ad Hoc Networks," *IEEE Southeast Conference*, Fort Lauderdale, Florida, April 8-10, 2005, pp. 319-326.
65. N. Meghanathan and A. Faragó, "Power Sensitive Power Control in Ad Hoc Networks," *43rd ACM Southeast Conference*, March 18-20, 2005, Kennesaw, Georgia, pp. 7C/1-6.
66. H. Wang, A. Faragó and S. Venkatesan, "Video Streaming over Multi-hop Wireless Networks", *7th IEEE International Symposium on Multimedia (IEEE ISM'05)*, Irvine, California, December 12-14, 2005, pp. 624-629.
67. A. Faragó, "On the Fundamental Limits of Topology Control", *ACM Workshop on Foundations of Mobile Computing (DIALM-POMC'04)*, Philadelphia, PA, Oct 1, 2004, pp. 1-7.
68. N. Meghanathan and A. Faragó, "Looking at Protocol Efficiency from a New Angle: Stability - Delay Analysis", *ACM International Workshop on Mobility Management and Wireless Access Protocols (MobiWac'04)*, Philadelphia, PA, Oct 1, 2004, pp. 51-55.
69. H. Wang, A. Faragó and S. Venkatesan, "A System for Video Streaming over Erroneous Multi-hop Wireless Networks" *Wireless Networking Symposium (WCNG'04)*, Austin, TX, Oct 20-22, 2004.
70. A. Faragó, "Availability Estimation of Routes, Trees and Subnetworks for End-to-End QoS", *IEEE Global Telecommunications Conference*

(*GLOBECOM'04*), Dallas, TX, Nov 29 - Dec 3, 2004, pp. pp. 3583-3587.

71. A. Faragó, “Route Metrics: Diversity and Unification”, *International Network Optimization Conference*, Evry/Paris, France, Oct 27-29, 2003, in press.
72. A. Faragó, “A Mathematical Method for Analyzing the Effect of Different Protocol Layers on Routing in Ad Hoc Networks”, *International Conference on Wireless Networks*, Las Vegas, Nevada, June 23-26, 2003.
73. A. Faragó, “A Unified Framework for Routing Metric”, High Speed Networking Workshop, Budapest, Hungary, May 21-22, 2003, pp. 114-117.
74. A. Faragó, F. Unghváry and A. Fumagalli, “On Incorporating Dependent Link Failures in a Traffic Engineering Model”, *IEEE International Conference on Communications (ICC'03)*, Anchorage, Alaska, May 11-15, 2003.
75. A. Faragó, “Graph Theoretic Analysis of Ad Hoc Network Vulnerability”, *Workshop on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt'03)*, INRIA Sophia-Antipolis, France, March 3-5, 2003, pp. 171-180.
76. A. Faragó, “Efficient Global Optimization of Physical and Logical Capacity”, accepted to the *7th IFIP Conference on Optical Network Design and Modelling (ONDM'03)*, Budapest, Hungary, Feb. 2-5, 2003, 921-938.
77. A. Fumagalli, M. Tacca, F. Unghváry and A. Faragó, “Shared Path Protection with Differentiated Reliability”, *IEEE International Conference on Communications (ICC'02)*, New York, April 28 – May 2, 2002.
78. A. Faragó and V. R. Syrotiuk. “Minimum Energy Broadcast with Performance Guarantee in Power-Controlled Ad Hoc Networks,” *14th International Conference on Wireless Communications* Calgary, Alberta, July 8-10, 2002.

79. A Faragó, “Scalable Analysis and Design of Ad Hoc Networks via Random Graph Theory”, *6th ACM International Workshop on Discrete Algorithms and Methods for Mobile Computing and Communications, (DIAL-M’02)*, Atlanta, GA, Sep. 28, 2002, pp. 43-50.
80. A Faragó, “Network Level Capacity Planning with Efficiently Computable Global Optimum” *10th IEEE International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS’02)*, Forth Worth, Texas, Oct 11-16, 2002, pp. 229-236.
81. A. Faragó, “Quick Estimation of Blocking and Utilization for Complex Traffic Flows”, *9th International Conference on Telecommunication Systems Modeling and Analysis*, Dallas, Texas, March 15–18, 2001, pp. 412–420.
82. A. Faragó, “A General Method for the Blocking Analysis of Networks with Dependent Links”, *2001 IEEE Workshop on High Performance Switching and Routing*, Dallas, Texas, May 29–31, 2001, pp. 124–129.
83. A. Faragó and V. R. Syrotiuk. “Algorithmic Problems in Power Controlled Ad Hoc Networks,” *Proceedings of the 14th International Conference on Parallel and Distributed Computing Systems (PDCS 2001)*, Dallas, Texas, August 8–10, 2001.
84. A. Faragó and V. R. Syrotiuk. “MERIT: A Unified Framework for Routing Protocol Assessment in Mobile Ad Hoc Networks,” *Proceedings of the 7th Annual International Conference on Mobile Computing and Networking (Mobicom 2001)*, Rome, Italy, July 16–21, 2001.
85. A. Faragó, “A Method to Handle Dependent Events in Network Performance and Reliability Evaluation”, *9th IFIP Working Conference on Performance Modelling and Evaluation of ATM and IP Networks*, Budapest, Hungary, June 27–29, 2001, pp. 299–305.
86. I. Chlamtac, A. Faragó, A.D. Myers, V.R. Syrotiuk, and G. Záruba. “A Performance Comparison of Hybrid and Conventional MAC Protocols for Wireless Networks,” *Proceedings of the 51st IEEE International*

Vehicular Technology Conference (VTC'2000), Tokyo, Japan, May 15–18, 2000.

87. A. Faragó, A.D. Myers, V.R. Syrotiuk, and G. Záruba. “A New Approach to MAC Protocol Optimization,” *Proceedings of the IEEE Global Communications Conference (Globecom'2000)*, San Francisco, California, November 29–December 1, 2000.
88. A. Faragó, “Blocking Probability Estimation for General Traffic Under Incomplete Information”, *IEEE International Conf. on Communications (ICC'2000)*.
89. I. Chlamtac, A. Faragó, A.D. Myers V.R. Syrotiuk and G. Záruba, “ADAPT to Mobility” *IEEE Global Telecommunications Conference (GLOBECOM'99)*, Rio de Janeiro, Brazil, December 1999.
90. S. Basagni, I. Chlamtac, A. Faragó, V.R. Syrotiuk, and R. Talebi, “Route Selection in Mobile Multimedia Ad Hoc Networks”, *Sixth IEEE International Workshop on Mobile Multimedia Communications, (MO-MUC'99)*, San Diego, CA, November 15-17, 1999.
91. A. Faragó, I. Chlamtac and S. Basagni, “Virtual Path Network Topology Optimization Using Random Graphs”, *IEEE INFOCOM'99*, New York, NY, March 1999, pp. 491-496.
92. H. Zhang, I. Chlamtac and A. Faragó, “Efficient Load Balancing for UBR Traffic in ATM Networks”, *IEEE International Conf. on Communications (ICC'99)*, Vancouver, Canada, June 1999.
93. A. Faragó, T. Cinkler, S. Rácz, Á. Magi, G. Gordos, Á. Horváth and P. Laborczi, “Virtual Path Layout Design”, *8th International Telecom. Network Planning Symp. (NETWORKS'98)*, Sorrento, Italy, October 1998, pp. 581-585.
94. A. Faragó, Á. Szentesi and B. Szviatovszki, “Allocation of Administrative Weights in PNNI”, *8th International Telecom. Network Planning Symp. (NETWORKS'98)*, Sorrento, Italy, October 1998, pp. 621-626.

95. H. Zhang, I. Chlamtac, A. Faragó, "Performance Analysis of Time-Spread Multiple Access (TSMA) Protocol in Multihop Wireless Networks", *IEEE International Performance, Computing and Communications Conference*, Tempe/Phoenix, AZ, USA; Feb. 1998, pp. 402-408.
96. J. Bíró, A. Faragó and T. Trón, "A Linear Programming Neural Circuit Model", *Polish-Czech-Hungarian Workshop on Circuit Theory, Signal Processing and Applications*, Budapest, Hungary, Sept. 3-7, 1997, pp. 40-45.
97. P. Bahl, I. Chlamtac and A. Faragó, "Optimizing Resource Utilization in Wireless Multimedia Networks", *IEEE International Conference on Communications (ICC'97)*, Montreal, Quebec, Canada, June 1997, pp. 1432-37.
98. S. Basagni, I. Chlamtac and A. Faragó, "A Generalized Clustering Algorithm for Peer-to-Peer Networks", *Workshop on Algorithmic Aspects of Communications*, Bologna, Italy, July, 1997.
99. T. Cinkler, L. Ast, A. Faragó and T. Henk, "Configuration of the ATM-Layer over Optical Networks", *5th International Conf. on Telecommunication Systems Modeling and Analysis*, Nashville, TN, USA, March 20-23, 1997.
100. I. Chlamtac, A. Faragó and H. Zhang, "A Generalized TSMA Protocol with Service Guarantees in Mobile Multihop Networks", *IFIP Conference on Personal Wireless Communications (PWC'96)*, Frankfurt am Main, Germany, Dec. 1996.
101. A. Faragó T. Cinkler, H. Vuthanh and Sz. Malomsoky, "Joint Planning of the Physical and Logical Configuration of ATM Networks" *NETWORKS'96 International Network Planning Symposium*, Sydney, Australia, Nov. 24-29, 1996, pp. 119-124.
102. I. Chlamtac, A. Faragó, T. Henk and G. Gordos, "Optimizing Bandwidth Allocation in Cellular Networks with Multirate Traffic", *IEEE Global Telecommunications Conference (GLOBECOM'96)*, Nov. 18-22, 1996, London, U.K., pp. 1126-1130.

103. J. Bíró, A. Faragó , T. Trón and M. Boda, "Neural Networks for Logical Partitioning of ATM Networks" *IEEE Global Telecommunications Conference (GLOBECOM'96)*, Nov. 18-22, 1996, London, U.K., pp. 745-749.
104. I. Chlamtac, A. Faragó and H. Zhang, "A New Criterion for Route Selection in Communication Networks with Delay Sensitive Traffic", *International Conf. on Computer Communication and Networks (ICCCN'96)*, Rockville, Maryland, Oct. 1996, pp. 317-320.
105. I. Chlamtac, A. Faragó and T. Zhang, "Efficient Routing of Lightpaths", *MILCOM'96, IEEE Conference on Military Communications*, McLean, Virginia, October, 1996.
106. I. Chlamtac, A. Faragó and H. Zhang, "A Fundamental Relationship Between Fairness and Optimum Throughput in TDMA Protocols", *IEEE International Conference on Universal Personal Communications (ICUPC'96)*, Cambridge, MA, Sep. 1996. pp. 671-675.
107. A. Faragó, S. Blaabjerg, W. Holender, B. Stavenow, T. Henk, L. Ast and S. Székely, "Enhancing ATM Network Performance by Optimizing the Virtual Network Configuration", *IFIP Conference on Performance of Communication Systems (PCN'95)* , Istanbul, Oct 1995, published in: S. Fdida and R.O. Onvural (eds.), *Data Communications and their Performance*, Chapman & Hall; London, 1996, pp. 401-414.
108. Zs. Haraszti, I. Dahlquist, A. Faragó and T. Henk, "PLASMA - An Integrated Tool for ATM Network Operation", *International Switching Symposium (ISS'95)*, Berlin, Germany, 1995, pp. 314-318.
109. A. Faragó: Virtual Networking – A New Era in Network Management, *International Conference on Effective Network Management Systems*, paper # 2, London, May 1995.
110. A. Faragó, S. Blaabjerg, M. Boda, G. Gordos, Zs. Haraszti and T. Henk, "Virtual Networking and Real-Time Dimensioning – A Paradigm Shift in Network Management", *TELECOM'95*, Geneva, Switzerland, 1995.

111. A. Faragó, M. Boda, H. Brandt, T. Henk, T. Trón, J. Bíró, “Virtual Lookahead – A New Approach to Train Neural Nets for Solving On-Line Decision Problems”, *IEEE International Workshop on the Application of Neural Networks to Telecommunications*, Stockholm, May 1995, pp. 265-272.
112. J. Bíró, Z. Koronkai, H. Brandt, A. Faragó, T. Henk and T. Trón, “Efficient Extensions of Nonlinear Programming Neural Networks”, *International Conference on Artificial Neural Networks (ICANN'95)*, Paris, 1995, vol. 2, pp. 407-411.
113. A. Faragó, S. Blaabjerg, W. Holender, T. Henk, A. Szentesi, and Z. Ziaja, “Resource Separation - an Efficient Tool for Optimizing ATM Network Configuration”, *NETWORKS'94 International Network Planning Symposium*, Budapest, Hungary, Sept. 1994, pp. 83-88.
114. A. Faragó, “VP Networks Designed as Network Infrastructure”, In: *COST 242 Interim Report* (published by European Cooperation in the Field of Science and Technology), 1994, pp. 96-98.
115. I. Chlamtac, A. Faragó and T. Zhang, “How to Establish and Utilize Virtual Paths in ATM Networks”, *IEEE International Conference on Communications (ICC'93)*, Geneva, Switzerland, May 1993, pp. 1368-1372.
116. A. Faragó, “A Neural Structure as a Tool for Optimizing Routing and Resource Management in ATM Networks”, *Electronic Proceedings of the International Conference on the Application of Neural Networks in Telecommunications*, Princeton, N.J., Oct 1993.
117. I. Chlamtac and A. Faragó, “An Optimal CDMA Channel Access Protocol”, *IEEE International Conference on Communications (ICC'93)*, Geneva, Switzerland, May 1993, pp. 133-136.
118. I. Chlamtac and A. Faragó, “Making Transmission Schedules Immune to Topology Changes in Multi-Hop Packet Radio Networks”, *IEEE International Conference on Communications (ICC'93)*, Geneva, Switzerland, May 1993. pp. 1854-1858.

119. A. Faragó and G. Lugosi, "Strong Universal Consistency of Neural Network Classifiers", *IEEE International Symposium on Information Theory*, San Antonio, Texas, January, 1993, p. 431.
120. A. Faragó, I. Chlamtac and H.Y. Ahn, "A Nearly Optimum Slot Allocation Algorithm for CDMA Packet Radio Networks", *MILCOM'92, IEEE Conference on Military Communications*, San Diego, California, Oct. 1992, pp. 769-773.
121. A. Faragó, "On the Intersection of Independence Systems", *International Conference on Sets, Graphs and Numbers*, Budapest, Hungary, 1991, pp. 265-272.
122. G. Lugosi and A. Faragó, "A Parameter Estimation Algorithm for Speech Recognition to Maximize State Optimized Joint Likelihood", *IEEE International Symp. on Information Theory*, San Diego, California, 1990, p. 161.
123. A. Faragó, G. Gordos and G. Lugosi, "Methods for Decreasing the Response Time in Isolated Word Speech Recognition", *Speech Research International Conference*, Budapest, Hungary, 1989, pp. 255-258.
124. A. Faragó and G. Lugosi, "Hidden Markov Processes and their Application in Modelling Signals with Time-Varying Properties", *Conference of Program Designers*, Eötvös Lóránd University, Budapest, Hungary, 1988, pp. 243-248.
125. G. Lugosi and A. Faragó, "An Optimal Algorithm for an Automatic Speech Recognition and Segmentation Model", In: *Digitale Sprachverarbeitung - Prinzipien und Anwendungen, Vorträge der ITG-Fachtagung*, Bad Neuheim, Germany, 1988; VDE-Verlag, Berlin 1988, pp. 159-164.
126. A. Faragó, G. Gordos, I. Koutny, G. Magyar and L. Osváth, "VERBIDENT: an Isolated Word Recognizer", *9th International Conference on Acoustics*, Budapest, Hungary, 1988, pp. 115-119.
127. A. Faragó, "F-Independence Number of Graphs", *7th Hungarian Conf. on Combinatorics, Finite and Infinite Sets*, Eger, Hungary, 1987, pp. 221-226.

- 128. A. Faragó, “On a Combinatorial Clustering Problem”, *Conf. of Program Designers*, Eötvös Lóránd University, Budapest, 1986, pp. 101-104.
- 129. A. Faragó, “Algorithmic Problems in Graph Theory”, *Conf. of Program Designers*, Eötvös Lóránd University, Budapest, 1985, pp. 61-66.

PATENTS

- 130. A. Faragó and V.R. Syrotiuk, “Method and Device for Communicating Data within a Network by Combining Different Communication Approaches”, U.S. Patent # 7,159,027, January 2, 2007.
- 131. W. Holender, T. Henk, S. Blaabjerg, A. Faragó and B. Stavenow, “Enhancement of Network Operation and Performance”, U.S. Patent, May 30, 2000, Patent Number 6,069,894.
- 132. W. Holender, T. Henk, S. Blaabjerg, A. Faragó and B. Stavenow, “A Method and Device for Partitioning Physical Network Resources”, Swedish Patent, June 12, 1995, PCT/SE/95/00703.
- 133. W. Holender, T. Henk, S. Blaabjerg, A. Faragó and B. Stavenow, “Enhancement of Network Operation and Performance”, Swedish Patent, June 12, 1995, PCT/SE/95/00704.
- 134. M. Boda, T. Szécsy, S. Blaabjerg, J. Bíró, J. Vass, T. Trón and A. Faragó, “A Device and Method for Distributing Resources of a Physical Network”, Swedish Patent, March 8, 1995, PCT/SE/95/00838.
- 135. A. Faragó, G. Gordos, G. Magyar, G. Németh, L. Osváth, P. Tatai and Gy. Szilvási, “Method and Implementation for the Recognition of Sound from a Known Source”, Hungarian Patent, #207899, Dec 21, 1989 (6726/1989).

TECHNICAL REPORTS, PROJECT REPORTS

- 136. A. Faragó, “Sampling from Independence Systems”, Technical Report UTDCS-10-07, Dept. of Computer Science, The University of Texas at Dallas, Feb 2007.

137. A. Faragó, “Methods for Handling Non-Markovian Performance Models”, Technical Report UTDCS-11-07, Dept. of Computer Science, The University of Texas at Dallas, Feb 2007.
138. M. Park, W. Chen. J.K.V. Wilson, W. Wu and A. Faragó, “Fault Tolerant Dual Power Assignment in Wireless Sensor Networks”, Dept. of Computer Science, The University of Texas at Dallas, Technical Report UTDCS-52-06, Oct 2006.
139. M. Park, W. Chen. J.K.V. Wilson, M.T. Thai, W. Wu and A. Faragó, “A Dominating and Absorbent Set in Wireless Ad Hoc Networks with Different Transmission Range”, Dept. of Computer Science, The University of Texas at Dallas, Technical Report UTDCS-53-06, Oct 2006.
140. N. Meghanathan and A. Faragó, ”An Efficient Algorithm for the Optimal Number of Route Transitions in Mobile Ad Hoc Networks”, Dept. of Computer Science, The University of Texas at Dallas, Technical Report UTDCS-02-05.
141. N. Meghanathan and A. Faragó, ”Extension of the Algorithm for Optimal Number of path Transitions to Steiner Trees and Connected Dominating Sets”, Dept. of Computer Science, The University of Texas at Dallas, Technical Report UTDCS-03-05.
142. N. Meghanathan and A. Faragó, ”Comparison of Routing Strategies for Minimizing Energy Consumption in Mobile Ad Hoc Networks”, Dept. of Computer Science, The University of Texas at Dallas, Technical Report UTDCS-04-05.
143. N. Meghanathan and A. Faragó, ”Survey on Multicast Routing Protocols for Mobile Ad Hoc Networks”, Dept. of Computer Science, The University of Texas at Dallas, Technical Report UTDCS-08-05.
144. N. Meghanathan and A. Farago, “Stability - Delay Analysis in Mobile Ad Hoc Networks”, Technical Report UTDCS-10-04, Dept. of Computer Science, University of Texas at Dallas, March 2004.
145. N. Meghanathan and A. Farago, “Maximizing Network Lifetime under Fixed Energy Budget in Ad Hoc Networks,” Technical Report UTDCS-

- 21-04, Dept. of Computer Science, University of Texas at Dallas, July 2004
146. N. Meghanathan and A. Farago, "Power Sensitive Power Control in Ad Hoc Networks," Technical Report UTDCS-35-04, Dept. of Computer Science, University of Texas at Dallas, September 2004.
 147. N. Meghanathan and A. Farago, "Survey and Taxonomy of 55 Unicast Routing Protocols for Mobile Ad Hoc Networks," Technical Report UTDCS-40-04, Dept. of Computer Science, University of Texas at Dallas, November 2004.
 148. N. Meghanathan and A. Farago, "On the Route Refresh Frequency for On-demand Maximum Battery Life Routing in Ad Hoc Networks," Technical Report UTDCS-45-04, Dept. of Computer Science, University of Texas at Dallas, December 2004.
 149. A. Faragó, F. Unghváry and A. Fumagalli, "Towards the Unified Engineering of Traffic and Reliability", Technical Report UTDCS-34-02, Dept. of Comp. Sci., The Univ. of Texas at Dallas, Dec, 2002.
 150. A. Faragó, "A Counterexample to the Tang-Zhou Maximum Clique Algorithm", Technical Report, Dept. of Comp. Sci., Univ. of Texas at Dallas, UTDCS-11-01, Jan. 2001.
 151. A. Faragó and V. R. Syrotiuk, "MERIT: A Unified Framework for Routing Protocol Assessment in Mobile Ad Hoc Networks," Technical Report, Dept. of Comp. Sci., Univ. of Texas at Dallas, UTDCS-05-01, Jan. 2001.
 152. A. Faragó and V. R. Syrotiuk, "Transport Layer Routing Assessment in Mobile Ad Hoc Networks", Technical Report, Dept. of Comp. Sci., Univ. of Texas at Dallas, UTDCS-19-01, Aug. 2001.
 153. A Faragó, "Analysis of Multiservice Loss Networks with Arbitrary Link Dependencies", Technical Report UTDCS-09-00, Dept. of Computer Science, UTD, July 2000.

154. A Faragó, "Almost Surely Almost Exact Optimization in Random Graphs" Technical Report UTDCS-10-00, Dept. of Computer Science, UTD, Oct. 2000.
155. I. Chlamtac, A. Faragó, T. Zhang, "Optimizing the System of Virtual Paths in ATM Network Architecture", COST 242 Project Document, No. TD(93)25, (European Cooperation in the Field of Science and Technology), 1993.
156. I. Chlamtac, A. Faragó, H.Y. Ahn, "A Nearly Optimum Slot Allocation Algorithm for TDMA Protocols in Case of Multiple Reception Capacity", Technical Report TR-93-CSE-29, Dept. of Electrical & Computer Eng., Univ. of Massachusetts, Amherst, 1993.
157. I. Chlamtac, A. Faragó, "Bounded Delay Packet Routing in Large Multihop Communication Networks", Technical Report TR-93-CSE-26, Dept. of Electr. & Comp. Eng., Univ. of Massachusetts, Amherst., 1993.
158. I. Chlamtac, A. Faragó, H.Y. Ahn, "Topology Transparent Schedules for Packet Radio Networks", Technical Report TR-93-CSE-28, Dept. of Electr. & Comp. Eng., Univ. of Massachusetts, Amherst, 1993.
159. I. Chlamtac, A. Faragó, "Mobility and Multimedia: Towards Mobile ISDN Services Based on Packet Radio Networks", Technical Report TR-93-CSE-27, Dept. of Electr. & Comp. Eng., Univ. of Massachusetts, Amherst, 1993.
160. I. Chlamtac, A. Faragó and T. Zhang, "How to Establish and Utilize Virtual paths in ATM Networks", Technical Report TR-93-CSE-24, Dept. of Electr. & Comp. Eng., Univ. of Massachusetts, Amherst, 1993.
161. A. Faragó, "Mathematical Formulation Possibilities of the ATM Network Dimensioning and Flow Assignment Problem", Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1993.
162. G. Gordos, A. Faragó, "Overview of Routing Algorithms", Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1993.

163. G. Gordos, A. Faragó, “A Layered Conceptual Model to Support ATM Network Dimensioning and Routing”, Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1994.
164. A. Faragó, “Extension of Objective Functions from Link Level to Network Level in ATM Network Dimensioning”, Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1994.
165. G. Gordos, A. Faragó, “Description of Network State for Dimensioning and Routing Purposes”, Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1994.
166. A. Faragó, “Detailed Mathematical Formulation of the ATM Dimensioning Model”, Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1994.
167. A. Faragó, “An Improved Hoeffding-type Bound on Link Blocking Probability”, Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1994.
168. A. Faragó, “Capacity Partitioning in ATM Networks Using the Erlang Fixed Point Approximation”, Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1994.
169. A. Faragó, “A Simplified Dimensioning Model Based on Equivalent Link Blocking Probabilities”, Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1994.
170. A. Faragó, “Comparison of Network Partitioning Algorithms”, Dept. of Telecom. & Telematics, Tech. Univ. of Budapest, Hungary, 1994.
171. A. Faragó, “Introducing Revenue and Load Sharing in the Fixed Point Model”, Dept. of Telecom. & Telematics, Technical Univ. of Budapest, Hungary, 1994.
172. A. Faragó, S. Blaabjerg, W. Holender, T. Henk, L. Ast, A. Szentesi and Zs. Ziaja, “Optimal Partitioning of ATM Networks into Virtual Subnetworks”, COST 242 Project Document, No. TD(94)24, (European Cooperation in the Field of Science and Technology), 1994.

Further 25 reports in Hungarian, detailed list is omitted.