

Prof. Timo Hämäläinen: List of publications. 2018

Peer-reviewed journal papers:

1. M. Zolotukhin, A. Sayenko, and T. Hämäläinen. "On Optimal Deployment of Low Power Nodes for High Frequency Next Generation Wireless Systems". *Computer Networks* 144, Pages 120-140, 2018.
2. M. Zolotukhin, and T. Hämäläinen, "Data stream clustering for application-layer DDoS detection in encrypted traffic", *Cyber Security: Power and Technology*, Springer, Pages 111-131, 2018
3. E. Ivannikova and H. Park and T. Hämäläinen and K. Lee, "Revealing Community Structures by Ensemble Clustering using Group Diffusion". *Information Fusion*, Volume 42, Pages 24-36, July 2018.
4. Di Zhang, Zheng Chang, Fei Richard Yuy, Xianfu Chen and Timo Hämäläinen: "Double Auction based Multi-flow Transmission in Software-defined and Virtualized Wireless Networks". *IEEE Transactions on Wireless Communications*, 16 (12), 8390-8404. 2017. doi:10.1109/TWC.2017.2762300.
5. Paresh Rathod, Pasi Kamppi, and Timo Hamalainen, "Leveraging National Auditing Criteria to Implement Cybersecurity Safeguards for the Automotive Emergency Response Vehicles: A case study from Finland", *JDCTA (International Journal of Digital Content Technology and Its Applications)*, Vol. 11, No. 4, pp. 15-26, 2017.
6. M. Z. Asghar, P. Nieminen, S. Hämäläinen, T. Ristaniemi, M. A. Imran, and T. Hämäläinen, "Towards Proactive Context-Aware Self-healing for 5G Networks". *Computer Networks: Special Issue "Survivability Strategies for Emerging Wireless Networks"*, 2017.
7. M. Z. Asghar, P. Nieminen, S. Hämäläinen, T. Ristaniemi, M. A. Imran, and T. Hämäläinen, "Cell Degradation Detection based on an Inter-Cell Approach", *JDCTA (International Journal of Digital Content Technology and Its Applications)*, Volume 11, Number 1, Mar. 31, 2017.
8. F. Hosseinpour, P. V. Amoli, J. Plosila, T. Hamalainen, and H. Tenhunen, "An Intrusion Detection System for Fog Computing and IoT based Logistic Systems using a Smart Data Approach", *JDCTA (International Journal of Digital Content Technology and its Applications)*, Volume 10, No. 5, pp. 34-46, Dec. 2016.
9. M. Zolotukhin, T. Kokkonen, T. Hamalainen, J. Siltanen, "On Application-Layer DDoS Attack Detection in High-Speed Encrypted Networks", *JDCTA: International Journal of Digital Content Technology and its Applications*, Vol. 10, No. 5, pp. 14-33, Dec. 2016

10. P. V. Amoli, T. Hamalainen, G. David, M. Zolotukhin, and M. Mirzamohammad, "Unsupervised Network Intrusion Detection Systems for Zero-Day Fast-Spreading Attacks and Botnets", *JDCTA (International Journal of Digital Content Technology and its Applications)*, Volume 10 Issue 2, March 2016, Pages 1-13
11. A. Juvonen, T. Sipola, T. Hamalainen, "Online Anomaly Detection Using Dimensionality Reduction Techniques for HTTP Log Analysis", *Computer Networks*, 91, 46-56. doi:10.1016/j.comnet.2015.07.019, 2015
12. M. G. S. Sriyananda, Jyrki Joutsensalo, and Timo Hämäläinen: "Blind Source Separation based Interference Suppression Schemes for OFDM and DS-CDMA", *Telecommunications Systems Journal*, Springer, April 2015.
13. F. Hosseinpour, P. V. Amoli, F. Farahnakian, J. Plosila, T. Hamalainen: "Artificial Immune System Based Intrusion Detection: Innate Immunity using an Unsupervised Learning Approach", *International Journal of Digital Content Technology and its Applications (JDCTA)*, Vol. 8, No. 5, pp.01 – 12, 2014
14. J. Kellokoski, J. Koskinen, and T. Hämäläinen: "Always Best Connected Heterogeneous Network Concept", *Wireless Personal Communications*, Springer, 2014
15. L. Sheng, Y. Zhu, and T. Hämäläinen: "An Uncertain Optimal Control Model with Hurwicz Criterion", *Applied Mathematics and Computation*, Springer, 2013
16. M. G. S. Sriyananda, J. Joutsensalo, and T. Hämäläinen: "Blind Principles based Interference and Noise Reduction Schemes for OFDM", *Wireless Personal Communications*, Springer, 2012
17. M. G. S. Sriyananda, J. Joutsensalo, and T. Hämäläinen: "Blind Source Separation for OFDM with Filtering Colored Noise and Jamming Signal", *Journal of Communications and Networks*, Vol. 14, No. 4, August 2012
18. Z. Yuanguo, J. Joutsensalo and T. Hämäläinen: Solutions for fuzzy linear systems, *Information* 13, No. 1, 2010, pp. 23-30
19. A. Sayenko, O. Alanen, H. Martikainen, V. Tykhomyrov, O. Puchko, and T. Hamalainen, "WINSE: WiMAX NS-2 Extension", *Special Issue of the SIMULATION Journal: Software Tools, Techniques and Architectures for Computer Simulation*, 2010.
20. J. Joutsensalo, T. Hamalainen, O. Sayenko, "Qos Supported Networks, Scheduling, and Pricing: Theory and Applications", Book, University of Jyväskylä, 2008, 214 pages.
21. A. Sayenko, O. Alanen, and T. Hämäläinen, "Scheduling solution for the IEEE 802.16 base station", *Computer Networks*, Elsevier, Vol. 52, Issue 1, Pages 96-115, January 2008.

22. J. Joutsensalo, A. Viinikainen, M. Wikström, T. Hämäläinen, "Bandwidth allocation and pricing in multinode network", *AEU - International Journal of Electronics and Communications*, Volume 62, Issue 3, March 2008, Pages 185-192.
23. J. Joutsensalo, K. Luostarinen, O. Gomzikov, and T. Hämäläinen, "Delay Minimization and Pricing Method for the Network Services", *Acta Electrotechnica et Informatica*, No. 1, Vol. 7, 2007
24. A. Viinikainen, M. Wikström, J. Joutsensalo, and T. Hämäläinen, "Pricing based adaptive scheduling method for bandwidth allocation", *AEU - International Journal of Electronics and Communications*, Volume 61, Issue 2, Pages 118-126, 2007.
25. J. Puttonen, A. Viinikainen, M. Sulander, and T. Hämäläinen, "A Fast Handover Method for Real-Time Multimedia Services", Edited by: Ismail Khalil Ibrahim. *Handbook of Research on Mobile Multimedia, Chapter XIII*, ISBN: 1-59140-866-0 h/c; eISBN: 1-59140-868-7; 626 pp. 2006.
26. A. Sayenko, T. Hämäläinen, J. Joutsensalo, L. Kannisto, "Comparison and analysis of the revenue-based adaptive queuing models", *Journal of Computer Networks, Special Issue on Quality of Service*, 2006.
27. J. Joutsensalo, T. Hämäläinen, K. Luostarinen, and J. Siltanen, "Adaptive Scheduling Method for Maximizing Revenue in Flat Pricing Scenario.", *International Journal of Electronics and Communications*, Vol. 60, 2006.
28. A. Viinikainen, J. Puttonen, M. Sulander, T. Hämäläinen, T. Ylonen and H. Suutarinen, "Flow- based Fast Handover Method for Mobile IPv6 Environment - Implementation and Analysis", *Computer Communications, Special Issue on IPv6*, 2006.
29. E. Wallenius, T. Hämäläinen, T. Nihtilä, J. Puttonen, and J. Joutsensalo, "Simulations and Analysis of 3G and WLAN Interworking", *International Journal of Telecommunications*, 2005.
30. J. Puttonen, A. Viinikainen, M. Sulander and T. Hämäläinen, "A Fast Handover Method for Mobile IPv6 Networks", *Journal of Internet Technology, Special Issue on Heterogeneous IP Networks*, No.3, Volume 6, July 2005, ISSN 1607-9264, pp. 305 - 312.
31. A. Viinikainen, J. Puttonen, M. Sulander, T. Hämäläinen, T. Ylönen and H. Suutarinen, "Flow-Based Fast Handover for Mobile IPv6 Environment - Implementation and Analysis", *Elsevier Computer Communications Special Issue on IPv6: The Next Generation Internet Protocol*, 2005.
32. E. Wallenius, T. Hämäläinen, T. Nihtilä, J. Puttonen, J. Joutsensalo, "Simulation Study On 3G And WLAN Interworking", *IEICE Transactions on Communications*, 2005.

33. J. Puttonen, A. Viinikainen, M. Sulander, T. Hämäläinen, "A Fast Handover Method for Real Time Multimedia Services", *Handbook of Research on Mobile Multimedia*, 2005.
34. J. Joutsensalo, T. Hämäläinen, M. Paakkonen, and A. Sayenko: "QoS- and Revenue Aware Adaptive Scheduling Algorithm", *Journal of Communications and Networks*, Vol. 6, No.1 March 2004, pp. 68-77.
35. J. Zhang, T. Hämäläinen, and J. Joutsensalo, "Revenue-aware Resource Allocation Scheme in Multiservice IP Networks", *WSEAS Transactions on Communications*, Issue 1, Volume 3, pp. 277-281, Jan. 2004, ISSN 1109-2742.
36. J. Zhang, Timo Hämäläinen, and J. Joutsensalo, "Maximizing Service-Level-Agreement Revenues in Clustered-based Web Server Systems", *WSEAS Transactions on Information Science and Applications*, Issue 3, Volume 1, pp. 861-866, Sept. 2004, ISSN 1790-0832.
37. T. Hämäläinen, J. Siltanen, A. Viinikainen, and J. Joutsensalo: "Adaptive Tuning of Scheduling Parameters", *WSEAS Transactions on Computers*, Issue 1, Vol. 3, January 2004, ISSN 1109-2750, pp. 75-78.
38. T. Hämäläinen, J. Joutsensalo, K. Kaario, and A. Viinikainen, "Traffic Optimization with Iterative Weighted Scheduling Method". *WSEAS Transactions on Communications*, Issue 4, Vol. 2, October 2003, ISSN 1109-2742, pp. 404-409.
39. K. Kaario, T. Hämäläinen, and P. Raatikainen: " Adaptive Parameter Setting for QoS Aware Load Balancing Algorithm". *WSEAS Transactions on Communications*, Issue 1, Vol. 1, 2002, ISSN 1109-2742, pp. 144-149.
40. J. Joutsensalo and T. Hämäläinen: "Optimal Link Allocation and Revenue Maximization". *Journal of Communications and Networks*, Vol. 4, No. 2, June 2002, ISSN 1229-2370, pp 136-147.

Peer-reviewed international conference papers:

39. T. Hämäläinen, K. Kaario and P. Raatikainen: "Smart Buffer Management in ATM Switching". *Proceedings of Applications of Computational Intelligence Techniques in Telecommunication*, Imperial College, pp. 49-54, London, April 1999.
40. T. Hämäläinen, K. Kaario and P. Raatikainen: "Performance Measurements in Multimedia Switching". *Proceedings of International Conference on Telecommunications*, pp. 511-515, Cheju, Korea, June 1999.
41. T. Hämäläinen, K. Kaario and P. Raatikainen: "Delay Performance Measurements in Multimedia Switching". *Proceedings of the 25th Euromicro Conference*, Vol. II, pp. 360-366, Milan, September 1999.

42. T. Hämäläinen: "Measurement Techniques and Results of Cell Transfer Delay and Cell Delay Variation In ATM Based WAN". *Proceedings of the ATSC'2000*, pp. 115–120, Washington, April 2000.
43. T. Hämäläinen: "Frame Performance Testing at the ATM Adaptation Layer - Analysis and Measurements". *Proceedings of International Conference on Telecommunications*, Vol. I, pp.443–447, Acapulco, Mexico, May 2000.
44. T. Hämäläinen and P. Raatikainen: "Delay Jitter Simulations and Measurements of Time-critical Multimedia Components". *Proceedings of International Conference on Telecommunications*, pp. 433–437, Acapulco, Mexico, May 2000.
45. T. Hämäläinen and P. Raatikainen: "Time-critical Multimedia Components and Cell Delay Jitter". *Proceedings of WCC'2000*, Vol. II, pp. 1364 - 1371, Beijing, China, August 2000.
46. K. Kaario, T. Hämäläinen and J. Zhang: "Tuning of QoS Aware Load Balancing Algorithm (QoS-LB) for Highly Loaded Server Clusters". *Proceedings of IEEE International Conference on Networking 2001 (ICN'01)*, July 2001, Colmar, France.
47. T. Hämäläinen and E. Wallenius: "Case Study For 3G/UMTS Services and Billing Methods". *Seventeenth IEEE International Teletraffic Congress ITC-17*, September 2001, Salvador da Bahia, Brazil.
48. J. Joutsensalo and T. Hämäläinen: "QoS-Aware Adaptive Pricing for Network Services". *Proceedings of IEEE Globecom 2001*, November 2001, USA.
49. K. Kaario, T. Hämäläinen and M. Wikström: "Method for Improving Cache Hit-Rates in QoS-Aware Load Balancing Algorithm (QoS-LB)". *Proceedings of IEEE Globecom 2001*, November 2001, USA.
50. A. Niemi, T. Hämäläinen and J. Joutsensalo: "Optimization of User Traffic Profile in the Multi-service Networks". *International Conferences on Info-tech and Info-net, ICII2001*, October 2001, Beijing, China.
51. T. Hämäläinen and J. Joutsensalo : "Maximum Likelihood Algorithm for Link Allocation". *International Conferences on Info-tech and Info-net, ICII2001*, October 2001, Beijing, China.
52. T. Hämäläinen, M. Wikström and P. Raatikainen: "A Simulation Model for Studying of Caching Algorithms. *International Conferences on Info-tech and Info-net, ICII2001*, October 2001, Beijing, China.
53. J. Zhang, T. Hämäläinen, K. Kaario and J. Joutsensalo: "Qos-Aware Load Balancing Algorithm for Globally Distributed Web Systems". *International Conferences on Info-tech and Info-net, ICII2001*, October 2001, Beijing, China.
54. P. Raatikainen, M. Wikström and T. Hämäläinen: "Performance Simulations of a QoS Aware Caching Method". *The 20th Iasted International Multi-Conference Applied Informatics*, February 2002, Austria

55. P. Raatikainen, M. Wikström and T. Hämäläinen: "Response Delay of a Fair QoS based Caching Method". *International Conference on Telecommunications*, Beijing, China, June 2002.
56. M. Paakkonen, K. Kaario and T. Hämäläinen: "CoS Aware Traffic Flow Balancing in MPLS Networks". *International Conference on Telecommunications*, Beijing, China, June 2002.
57. K. Kaario, T. Hämäläinen, M. Makela, T. Ristaniemi: "Model for Optimal Load Balancing in Active Networks with Classes of Service and Web Caching". *International Conference on Telecommunications*, Beijing, China, June 2002.
58. T. Hämäläinen, J. Joutsensalo and J. Zhang: "Optimal Link Allocation and Charging Model". *Proceedings of SSGRR 2002*, L'Aquila, Italy, July, 2002.
59. J. Zhang, Timo Hämäläinen and Jyrki Joutsensalo: "Dynamic Partitioning: A Mechanism for Supporting Differentiated Services in Clusterbased Network Servers". *16th Nordic Teletraffic Seminar*, August 2002, Finland
60. J. Joutsensalo, T. Hämäläinen, and Jian Zhang: "Resource Allocation for Differentiated QoS by Adaptive Weighted Fair Queue Technique". *16th Nordic Teletraffic Seminar*, August, 2002, Finland.
61. E. Wallenius and T. Hämäläinen: "Pricing model for 3G/4G networks". *The 13th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications*, Volume: 1, 2002, pp. 187-191.
62. J. Zhang, T. Hämäläinen and J. Joutsensalo: "A New Mechanism for Supporting Differentiated Services in Cluster-based Network Servers". *Proceedings of the Tenth IEEE/ACM International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems*, October 2002, Fort Worth, Texas, pp. 427-432.
63. J. Joutsensalo, T. Hämäläinen and J. Zhang: "Revenue maximization-based adaptive WFQ". *Proceedings of APOC 2002*, October 2002, China.
64. J. Joutsensalo, T. Hämäläinen and J. Zhang: "Statistical bandwidth allocation for multiservice networks". *Proceedings of APOC 2002*, October 2002, China.
65. T. Hämäläinen and J. Joutsensalo: "Network Channel Allocation and Revenue Maximization". *Proceedings of APOC 2002*, October 2002, China.
66. T. Hämäläinen and J. Joutsensalo: "Link Allocation and Revenue Optimization for Future Networks", *Proceedings of IEEE Globecom 2002*, November 2002, Taiwan.
67. K. Kaario, T. Hämäläinen, and M. Pääkkönen: "Quality of Service and High Availability in Corporation-Wide Networks". *Proceedings of 2nd WSEAS International Conference on Automation and Information 2002*, Spain, December 2002.

68. K. Kaario, T. Hämäläinen, and M. Pääkkönen: "Quality of Service in MPLS Tunnels of Corporation-Wide Control Networks". *Proceedings of ICT 2003*, Thailand, April 2003.
69. J. Joutsensalo, T. Hämäläinen, M. Pääkkönen, and A. Sayenko: "Quality of Service and Revenue Maximization with Iterative Weighted Fair Queue". *Proceedings of ICT 2003*, Thailand, April 2003.
70. J. Joutsensalo, T. Hämäläinen, M. Pääkkönen, and A. Sayenko: "Adaptive Weighted Fair Scheduling Method for Channel Allocation". *Proceedings of IEEE ICC2003*, Alaska, May 2003.
71. A. Sayenko, J. Joutsensalo, T. Hämäläinen, and J. Siltanen: "An adaptive Approach to WFQ with the Revenue Criterion". *Proceedings of Eighth IEEE International Symposium on Computers and Communication, (ISCC 2003)*, 2003, Turkey, Page(s):181 -186.
72. K. Kaario, P. Raatikainen, T. Hämäläinen, and M. Pääkkönen: "A Lightpath Allocation Scheme for WDM Networks with QoS". *Proceedings of Eighth IEEE International Symposium on Computers and Communication, (ISCC 2003)*, 2003, Turkey, Page(s): 684 -689.
73. J. Joutsensalo, O. Gomzikov, T. Hämäläinen, and K. Luostarinen: "Enhancing Revenue Maximization with Adaptive WRR". *Proceedings of Eighth IEEE International Symposium on Computers and Communication, (ISCC 2003)*, Turkey, 2003, Page(s): 175 -180.
74. A. Sayenko, T. Hämäläinen, J. Joutsensalo, and J. Siltanen: "The simulation and analysis of the revenue criterion based adaptive WFQ". *Proceedings of IEEE ITC'18*, Germany, August 2003.
75. E. Wallenius, T. Hämäläinen, T. Nihtilä, J. Joutsensalo, and K. Luostarinen "3G Interworking with WLAN QoS 802.11e", *Proceedings of IEEE Vehicular Technology Conference, VTC Fall 2003*, Orlando, USA, October 2003.
76. J. Joutsensalo, T. Hämäläinen, A. Sayenko, and M. Paakkonen: "Call Admission Control for Quality of Service and Revenue Maximization", *Proceedings of IEEE Vehicular Technology Conference, VTC Fall 2003, Orlando, USA, October 2003*.
77. T. Hämäläinen, E. Wallenius, K. Luostarinen, T. Nihtilä, and J. Joutsensalo: "Providing QoS at the Integrated WLAN and 3G Environments", *Proceedings of the 14th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications*, Beijing 2003.
78. T. Hämäläinen, J. Joutsensalo, A. Sayenko, and M. Pääkkönen: "Providing QoS with Wireless Adaptive Scheduling in Linear Pricing Scenario", *Proceedings of the 14th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications*, Beijing 2003.

79. J. Joutsensalo, T. Hämäläinen, M. Pääkkönen, and A. Sayenko, "Analytic Solution for QoS-Aware Packet Scheduling", *Proceedings of the 9th IEEE Asia-Pacific Conference on Communications (APCC)*, Penang, Malaysia 21-24 September 2003.
80. T. Hämäläinen, E. Wallenius, K. Luostarinen, and T. Nihtilä, "End-to-End QoS Issues at the Integrated WLAN and 3G Environments", *Proceedings of the 9th IEEE Asia-Pacific Conference on Communications (APCC)*, Penang, Malaysia 21-24 September 2003.
81. A. Sayenko, T. Hämäläinen, J. Joutsensalo, and J. Siltanen, "On providing bandwidth and delay guarantees using the revenue criterion based adaptive WFQ", *Proceedings of the 9th IEEE Asia-Pacific Conference on Communications (APCC)*, Penang, Malaysia 21-24 September 2003.
82. O. Gomzikov, T. Hämäläinen, and J. Joutsensalo, "Node Scheduler Optimization For Different Traffic Classes With CAC Enhancement", *Proceedings of the 9th IEEE Asia-Pacific Conference on Communications (APCC)*, Penang, Malaysia 21-24 September 2003.
83. J. Zhang, K. Luostarinen, T. Hämäläinen, and J. Joutsensalo, "Enabling QoS Support in Global Replicated Web Systems", *Proceedings of the 9th IEEE Asia-Pacific Conference on Communications (APCC)*, Penang, Malaysia 21-24 September 2003.
84. E. Wallenius, T. Hämäläinen, J. Joutsensalo, and H. Koivisto, "Service Management Model for Integrated 3/4G and Wireless LANs", *Proceedings of The 10th IEEE International Conference on Electronics, Circuits and Systems (ICECS 2003)*, Sharjah, United Arab Emirates, December 2003.
85. T. Hämäläinen, M. Pääkkönen, J. Joutsensalo, A. Sayenko, and M. Ketola, "QoS- and Revenue Aware Adaptive Scheduling Algorithm", *Proceedings of The 10th IEEE International Conference on Electronics, Circuits and Systems (ICECS 2003)*, Sharjah, United Arab Emirates, December 2003.
86. E. Wallenius, T. Hämäläinen, T. Nihtilä, J. Joutsensalo, and H. Koivisto, "3G AND WLAN Interworking QoS solution", *Proceedings of The Fifth IEEE International Conference on Mobile and Wireless Communications Networks (MWCN 2003)*, Singapore, October 2003
87. A. Sayenko, T. Hämäläinen, "Policy-based information model for adaptive WFQ routers", *Proceedings of Theory and technique of data transmission and communication*, pp.300-301. Kharkov-Tuapse. 2003
88. M. Sulander, T. Hämäläinen, A. Viinikainen, and J. Puttonen, "Flow-based fast handover method for mobile IPv6 network", *Proceedings of IEEE Vehicular Technology Conference, VTC Spring 2004*, Milan, Italy, May 2004.

89. E. Wallenius, M. Grosse-Kreul and T. Hämäläinen, "Policy Language Based Management Model for Wireless Networks" *Proceedings of 11th International Telecommunications Network Strategy and Planning Symposium (Networks 2004)*, Vienna, Austria, June 2004.
90. J. Mäkelä, J. Narikka, T. Hämäläinen, A. Virkki, "Soft Handover And Routing Mechanisms For Mobile Devices" *Proceedings of 15th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC 04*, Barcelona, Spain September 2004.
91. J. Zhang, T. Hämäläinen, and J. Joutsensalo, "Packet Scheduling for Maximizing Revenue in a Network Node". In *Proceedings of 1st International Conference in E-Business and Telecommunication Networks (ICETE 2004)*, August 2004.
92. J. Zhang, T. Hämäläinen, and J. Joutsensalo, "Optimal Resource Allocation Scheme for Maximizing Revenue in the Future IP Networks". In *Proceedings of Joint Conference of 10th Asia Pacific Conference on Communications and 5th International Symposium on Multi-Dimensional Mobile Communications*. August 2004.
93. J. Makela, T. Hämäläinen, G. Fekete, J. Narikka, A.M. Virkki, "Mobility support and soft handover protocol for IP- networks", In *Proceedings of 1st International Conference in E-Business and Telecommunication Networks (ICETE 2004)*, August 2004.
94. E. Wallenius, T. Hämäläinen, T. Nihtila, J. Joutsensalo, "Providing QoS in 3G-WLAN environment with RSVP and diffserv", In *Proceedings of 1st International Conference in E-Business and Telecommunication Networks (ICETE 2004)*, August 2004.
95. J. Puttonen, A. Viinikainen, M. Sulander and T. Hämäläinen, "An analysis of the flow-based fast handover method for mobile IPv6 network", In *Proceedings of 1st International Conference in E-Business and Telecommunication Networks (ICETE 2004)*, August 2004.
96. J. Zhang, T. Hämäläinen, and J. Joutsensalo, "Maximizing Service-Level Agreement Revenues in Clustered-Based Web Server Systems". In *Proceedings of 4th WSEAS International Conference on Multimedia, Internet, and Video Technologies (ICOMIV 2004)*, September 2004.
97. J. Puttonen, A. Viinikainen, M. Sulander and T. Hämäläinen, "Performance Evaluation of the Flow-Based Fast Handover Method for Mobile IPv6 Network", In *Proceedings of IEEE Vehicular Technology Conference, VTC Fall 2004*, LA, USA, September 2004.
98. J. Zhang, T. Hämäläinen, and J. Joutsensalo, "Revenue-Aware Resource Allocation in the Future Multi-Service IP Networks". In *Proceedings of IFIP TC6 Conference on Network Control and Engineering for QoS, Security, and Mobility (Net-Con 2004)*, November 2004.

99. J. Zhang, T. Hämäläinen, and J. Joutsensalo, "Stochastic Analysis of Upper Delay Bound of GPS-Based Packetized Fair Queueing Algorithms", In *Proceedings of 12th IEEE International Conference on Networks (ICON 2004)*, November 2004.
100. O. Alanen, M. Paakkonen, T. Hämäläinen, J. Joutsensalo, "Multicast Admission Control in DiffServ Networks", In *Proceedings of 12th IEEE International Conference on Networks (ICON 2004)*, November 2004.
101. A. Sayenko, T. Hämäläinen, J. Joutsensalo, "Extension of the QoS policy information model to support adaptive queuing techniques", In *Proceedings of 12th IEEE International Conference on Networks (ICON 2004)*, November 2004.
102. A. Sayenko, T. Hämäläinen, J. Joutsensalo, P. Raatikainen, "Adaptive Scheduling Using the Revenue-based Weighted Round Robin", In *Proceedings of 12th IEEE International Conference on Networks (ICON 2004)*, November 2004.
103. A. Sayenko, T. Hämäläinen, J. Joutsensalo, P. Raatikainen: "Revenue-Based Adaptive Deficit Round Robin", *Proceedings of Quality of Service in Multiservice IP Networks, Third International Workshop, QoS-IP 2005*, Catania, Italy, February 2-4, 2005. pp. 600-612
104. O. Alanen, M. Paakkonen, M. Ketola, T. Hämäläinen and J. Joutsensalo, "Enhanced Admission Control Solution for Multicasting With DiffServ", *Proc. of 1st Conference on Next Generation Internet Networks*, Italy, April 2005.
105. J. Joutsensalo, T. Hämäläinen, J. Siltanen, and K. Luostarinen, "Delay Guarantee and Bandwidth Allocation for Network Services", *Proc. of 1st Conference on Next Generation Internet Networks*, Italy, April 2005.
106. J. Joutsensalo, A. Viinikainen, T. Hämäläinen, and J. Siltanen, "Bandwidth Allocation and Pricing for Telecommunications Network", *Proc. of 1st Conference on Next Generation Internet Networks*, Italy, April 2005.
107. E. Wallenius, T. Hämäläinen, O. Alanen, H. Helantera, "Visualization and Performance Analysis Method for 4G Networks", *Proc. of 11th European Wireless Conference*, April 10-13, 2005.
108. A. Niemi, T. Hämäläinen, J. Joutsensalo, "CDMA Channel Estimation with Adaptive Fuzzy Filters", *Proceedings of the WSEAS International Conference on AMCOS'05*, Rio de Janeiro, Brazil, April 2005.
109. A. Niemi, T. Hämäläinen, J. Joutsensalo, "Generic model for revenue maximization", *Proceedings of the WSEAS International Conference on AMCOS'05*, Rio de Janeiro, Brazil, April 2005.
110. J. Puttonen, H. Suutarinen, T. Ylonen, A. Viinikainen, M. Sulander and T. Hämäläinen, "Flow-based Fast Handover Performance Analysis in Mobile IPv6 for Linux Environment", *Proc. of IEEE Vehicular Technology Conference Spring 2005 (VTC'S05)*, May 2005, Stockholm, Sweden.

111. J. Joutsensalo, A. Viinikainen, T. Hämäläinen, and J. Siltanen, "Bandwidth Allocation, Bit Rate and Pricing", *Proc. of IEEE ICC2005*, June 2005.
112. A. Viinikainen, S. Kascak, J. Puttonen, M. Sulander, T. Hämäläinen, "Fast Upstream Handover in Mobile IPv6", *Proceedings of the 62nd semiannual IEEE Vehicular Technology Conference (VTC'F05)*, September 2005, Dallas, USA
113. J. Puttonen, G. Fekete, J. Mäkelä, T. Hämäläinen, J. Narikka, "Using Link Layer Information for Improving Vertical Handover", *Proceedings of the 16th Annual IEEE International Symposium on Personal Indoor and Mobile Radio Communications (PIMRC05)*, September 2005, Berlin, Germany.
114. Jyrki Joutsensalo, Ari Viinikainen, Lari Kannisto and Timo Hämäläinen, "Packet Scheduling with Revenue Optimization and Weighted Delay Minimization", *IEEE Globecom 2005*.
115. Lari Kannisto, Ari Viinikainen, Jyrki Joutsensalo and Timo Hämäläinen, "Optimized Pricing and Closed Form Algorithm for WFQ Scheduling", *The IEEE International Conference on Tencon*, pp. 1290-1295, 2005.
116. O. Alanen, T. Hämäläinen, O. Karppinen, and E. Wallenius, "Management and Analysis Case for IPTV Services" *Proc. of 4th International Information and Telecommunication Technologies Symposium*, December 14-16, 2005, Florianopolis, SC - Brazil
117. J. Siltanen, I. Kannisto, J. Joutsensalo, and T. Hämäläinen, "Bandwidth Broker and Pricing in Multinode Network", *Proc. of The IASTED International Conference on Networks and Communication Systems*, March 29-31, 2006, Chiang Mai, Thailand
118. K. Luostarinen, O. Gomzikov, J. Joutsensalo, and T. Hämäläinen "Delay Guarantee, Bandwidth Allocation, and Pricing in Multinode Network", *Proc. of The IASTED International Conference on Networks and Communication Systems*, March 29-31, 2006, Chiang Mai, Thailand
119. Lari Kannisto, Ari Viinikainen, Jyrki Joutsensalo and Timo Hämäläinen, "Adaptive Algorithm for Revenue Maximization in WFQ Scheduler", *The IEEE 20th International Conference on Advanced Information Networking and Applications April 18 (Tue.) - April 20 (Thu.)*, 2006, Vienna.
120. Alexander Sayenko, Olli Alanen, Olli Karpinen, Timo Hämäläinen, "Analysis and simulation of the signaling protocols for the DiffServ framework", *Proc. of 6th International Conference on Next Generation Teletraffic and Wired/Wireless Advanced Networking NEW2AN 2006*, May 29 - June 2, 2006, St.Petersburg, Russia
121. Alexander Sayenko, Olli Alanen, Timo Hämäläinen, and Juha Karhula, "Ensuring the QoS requirements in 802.16 Scheduling", *Proc. of IEEE/ACM MSWiM 2006*, Oct. 2-6, 2006, Torremolinos, Spain.

122. I. Kannisto, Timo Hämäläinen, J. Joutsensalo, and E. Wallenius, "Adaptive Scheduling Method for WiMAX base stations", *Proc. of European Wireless Conference 2007*, April 1 to 4, 2007, Paris, France.
123. A. Sayenko, O. Alanen, and T. Hämäläinen, "On Contention Resolution Parameters for the IEEE 802.16 Base Station", *Proc. of IEEE Globecom 2007 Wireless Networking Symposium - Globecom 2007*.
124. A. Sayenko, V. Tykhomyrov, H. Martikainen, O. Alanen and T. Hämäläinen, "Performance evaluation of the WiMAX ARQ mechanism", *Proc. of NEW2AN 2007, The 7th International Conference on Next Generation Teletraffic and Wired/Wireless Advanced Networking*, St. Petersburg, Russia, 2007.
125. A. Sayenko, O. Alanen and T. Hamalainen, "ARQ Aware Scheduling for the IEEE 802.16 Base Station", *Proc. of the IEEE International Conference on Communications*, Beijing, China, May 19-23, 2008.
126. E. Wallenius, T. Hämäläinen, and Kari Halttunen, "XML Based 3G/LTE Network and Service Management Concept", *Proc. of the Seventh International Conference on Networking, ICN 2008*, April 13-18, 2008 - Cancun, Mexico.
V. Tykhomyrov, A. Sayenko, H. Martikainen, O. Alanen, and T. Hamalainen "On ARQ feedback intensity of the IEEE 802.16 ARQ mechanism", *Proc. of International Conference on Telecommunications (ICT'08)*, St. Petersburg, Russia, 16-19 June 2008.
127. T. Hämäläinen, J. Joutsensalo, V. Tykhomyrov, and A. Sayenko, "QoS issues in Adaptive Scheduling in Heterogeneous Networks with Linear Pricing Scenario", *Proc. of the 2nd IEEE International Interdisciplinary Conference on Portable Information Devices (Portable 2008)*, August 17-20, 2008, Garmisch-Partenkirchen, Germany.
128. Kotilainen, N., J. Kurhinen, T. Hämäläinen, and K. Luostarinen, "Portable Process Control with DynaControl", *Proc. of the 2nd IEEE International Interdisciplinary Conference on Portable Information Devices (Portable 2008)*, August 17-20, 2008, Garmisch-Partenkirchen, Germany.
129. E. Wallenius, T. Hamalainen, K. Halttunen, and J. Naarmala: "Enterprise and Community level IMS, a New Business Opportunity", *Proc. of the First International workshop on Next Generation Networks: Open Platforms and services (NGNOPS 2008)*, 17 September 2008, Cardiff, Wales, UK.
130. J. Puttonen, G. Fkete, T. Vaaramaki and T. Hämäläinen, "Multiple Interface Management of Multihomed Mobile Hosts in Heterogeneous Wireless Environments", *Proc. of the International Conference on Networks*, Cancun, Mexico, March 1-6, 2009.
131. A. Sayenko, O. Alanen, H. Martikainen, V. Tykhomyrov, O. Puchko, and T. Hämäläinen, "WINSE: WiMAX NS-2 Extension", *Proc. of Second International Conference on Simulation Tools and Techniques, SIMUTools 2009*, March 2-6 2009, Rome, Italy.

132. J. Blackledge, T. Hämäläinen and J. Joutsensalo, "Inverse Scattering Solutions for Side-Band Signals", *Proc. of the 20th Irish Signals and Systems Conference*, 10th - 11th June 2009, Dublin, Ireland.
133. G. Fegete and T. Hämäläinen, "State of Host-Centric Multihoming in IP networks", *Proc. of the Third IFIP International Conference on New Technologies, Mobility and Security*, Cairo, Egypt, 20-23rd December 2009.
134. V. Tykhomyrov, A. Sayenko, O. Puchko and T. Hämäläinen, "Decreasing the map overhead in the IEEE 802.16 OFDMA System", *Proc. of the 16th European Wireless Conference*, April 12-15, 2010, Italy
135. Jari Kellokoski, Erno Tukia, Eero Wallenius, Timo Hämäläinen, Jyri Naarmala, "Registration Performance Comparison Between IP Multimedia Subsystem and Session Initiation Protocol Networks", in *Proc. of ICUMT 2010 : International Congress on Ultra Modern Telecommunications and Control Systems*, Oct 18, 2010 - Oct 20, 2010, Moscow, Russia
136. D. Petrov and T. Hamalainen, "Efficient WH-OFTDM signals processing", in *Proc. of ICUMT 2010 : International Congress on Ultra Modern Telecommunications and Control Systems*, Oct 18, 2010 - Oct 20, 2010, Moscow, Russia
137. Jari Kellokoski, Erno Tukia, Eero Wallenius, Timo Hämäläinen, Jyri Naarmala, "Call and Messaging Performance Comparison Between IMS and SIP Networks", in *Proc. of IMSAA 2010 - 4th IEEE International Conference on Internet Multimedia Systems Architecture and Application*, Dec. 15, 2010 - Dec 17, 2010, Bangalore / India
138. J. Siltanen, K. Luostarinen, and T. Hämäläinen, "Practical Performance Measurements and Analysis of IEEE 802.16 Networks", in *Proc. of The Fourth International Conference on Communication Theory, Reliability, and Quality of Service, CTRQ 2011*, April 17-22, 2011 - Budapest, Hungary
139. Andrey Garnaev, Timo Hämäläinen, Mikhail Zolotukhin, "A Stackelberg tariff game between provider, a primary and a secondary user", in *Proc. of Fifth International Conference on Game Theory and Management (GTM2011)* on June, 27-29, 2011, St. Petersburg, Russia
140. M. Chaudhry (Jyu), T. Hämäläinen, and J. Joutsensalo "A Practical Perspective of Wireless Network Coding", *Proc. of ICWN'11 - The 2011 International Conference on Wireless Networks*, July 18-21, 2011, Las Vegas, USA.
141. J. Kellokoski, O. Ivannikov, T. T. Hämäläinen, and K. Luostarinen, Location-based Service with Spatial Data Analysis within IP Multimedia Subsystem, in *Proc. of The Third International Conference on Advances in Future Internet, AFIN 2011*, August 21-27, 2011 - French Riviera, France
142. D. Petrov and T. Hämäläinen, Better Performance of Mobile Devices in Time-Frequency Dispersive Channels Using Well-Localized Bases, in *Proc. of NEW2AN*

2011: 11th International Conference on Next generation Wired/Wireless Advanced Networking, August 23-25, 2011, St. Petersburg, Russia

143. M. Zolotukhin, V. Hytonen, T. Hämäläinen, and A. Garnaev, Optimal Relays Deployment for 802.16j Networks, in *Proc. of MONAMI 2011: 3rd International ICST Conference on Mobile Networks and Management*, 21-23 September, 2011, Aveiro, Portugal
144. J. Kellokoski, T. Hämäläinen, User Centric Approach to Always Best Connected Networks, in *Proc. of ICUMT 2011: International Congress on Ultra Modern Telecommunications and Control Systems*, October 5-7, 2011, Budapest, Hungary
145. MGS. Sriyananda, T. Hämäläinen and J. Joutsensalo, Blind Source Separation for OFDM with Filtering Colored Noise Out, in *Proc. of The inaugural IEEE Swedish Communication Technologies Workshop (Swe-CTW 2011)*, 19-21 October, 2011, Stockholm, Sweden.
146. M. G. S. Sriyananda, J. Joutsensalo, and T. Hämäläinen, “Blind Source Separation for OFDM with Gradient Algorithms”, in *Proc. of 6th International Conference on Computer Sciences and Convergence Information Technology, ICCIT*, 29.Nov.-1.Dec, 2011, Jeju Island, Korea.
147. M. G. S. Sriyananda, J. Joutsensalo, and T. Hämäläinen, “Blind Source Separation for DS-CDMA with Filtering Colored Noise”, in *Proc. of 6th International Conference on Computer Sciences and Convergence Information Technology, ICCIT*, 29.Nov.-1.Dec, 2011, Jeju Island, Korea.
148. K. Luostarinen, M. Jadoon, J. Siltanen, and T. Hämäläinen, “Spatial Diversity and Correlation for MIMO in BANs: Parametric Simulation Scheme”, in *Proc. of 6th International Conference on Communications and Information Technology (CIT '12)*, March 7-9, 2012, Athens, Greece.
149. M. Zolotukhin, T. Hämäläinen and A. Juvonen: ”Growing Hierarchical Self-Organising Maps for Online Anomaly Detection by using Network Logs”, in *Proc. of 8th International Conference on Web Information Systems and Technologies (WEBIST'2012)*, 18-21 April, 2012, Porto, Portugal
150. S. Sriyananda, J. Joutsensalo and T. Hämäläinen, “Performance of OFDM with Blind Interference Suppression Schemes”, in *Proc. of 5th IFIP International Conference on New Technologies, Mobility and Security (NTMS'2012)*, 7-10 May 2012, Istanbul, Turkey.
151. M. Zolotukhin, V. Hytonen, T. Hämäläinen, and A. Garnaev, “A Relay Deployment Mechanism for One Scenario of Cost-Effective Coverage Extension in IEEE 802.16j Networks”, in *Proc. of 5th IFIP International Conference on New Technologies, Mobility and Security (NTMS'2012)*, 7-10 May 2012, Istanbul, Turkey.

152. J. Kellokoski, J. Hyvonen, and T. Hämäläinen: “Power Consumption Analysis of the Always-Best-Connected User Equipment”, in *Proc. of 5th IFIP International Conference on New Technologies, Mobility and Security (NTMS'2012)*, 7-10 May 2012, Istanbul, Turkey.
153. J. Kellokoski, J. Hyvonen, and T. Hämäläinen: “Real-life Performance Analysis of Always-Best-Connected Network”, in *Proc. of 5th IFIP International Conference on New Technologies, Mobility and Security (NTMS'2012)*, 7-10 May 2012, Istanbul, Turkey.
154. M. Zolotykhin, T. Hämäläinen and A. Juvonen, “Online Anomaly Detection by Using N-gram Model and Growing Hierarchical Self-Organizing Maps”, in *Proc. of IEEE IWCMC 2012*, Limassol, Cyprus, August 2731, 2012
155. M. G. S. Sriyananda, J. Joutsensalo, and T. Hämäläinen: “Signal Detection for Spread Spectrum Communication Systems with Gradient Algorithm”, in *Proc. of IEEE WiMob 2012*, 8-10 Oct., Barcelona, Spain
156. D. Petrov, T. Hämäläinen, and P. Gonchukov:” Computationally Efficient Modulation of Well-Localised Signals for OFDM”, in *Proc. of IEEE WiMob 2012*, 8-10 Oct., Barcelona, Spain
157. K. Luostarinen, J. Siltanen, M. Perkkio, and T. Hämäläinen: “VoIP Performance Analysis in IEEE802.16 Networks “, in *Proc. of MOBIWAC 2012: The 10th ACM International Symposium on Mobility Management and Wireless Access*, October 21 - 22, 2012, Paphos, Cyprus Island
158. J. Kellokoski, J. Koskinen, R. Nyrhinen, and T. Hämäläinen:”Efficient Handovers for Machine-to-Machine Communications Between IEEE 802.11 and 3GPP Evolved Packed Core Networks”, in *Proc. of The IEEE International Conference on Internet iThings 2012*, 20-23 November 2012 in Besanon, France
159. J. Kellokoski, J. Koskinen, and T. Hämäläinen: “Context and Location Aware Always-Best-Connected Concept for Heterogeneous Network”, in *Proc. of the IFIP Wireless Days conference*, November 21-23, 2012, Dublin, Ireland
160. Fabian Montealegre Alfaro, Vesa Hytten, Oleksandr Puchko and Timo Hämäläinen: “Scheduling Multipoint-to-Point transmissions over HSDPA based Single Frequency Network”, *Third IEEE International Conference on Information Science and Technology (ICIST 2013)*, March 23-25, Yangzhou, Jiangsu, China, 2013
161. M. Zolotykhin, E. Ivannikova, and T. Hämäläinen:”Novel Method for the Prediction of Mobile Location Based on Temporal-Spatial Behavioral Patterns”, *Third IEEE International Conference on Information Science and Technology (ICIST 2013)*, March 23-25, Yangzhou, Jiangsu, China, 2013
162. P. Amoli and T. Hämäläinen:”Real Time Multi Stage Unsupervised Intelligent Engine for NIDS to Enhance Detection Rate of Unknown Attacks”, *Third IEEE International Conference on Information Science and Technology (ICIST 2013)*, March 23-25, Yangzhou, Jiangsu, China, 2013

163. M. G. S. Sriyananda, J. Joutsensalo, and T. Hämäläinen: “Blind Principles Based Interference Cancellation Schemes for Spread Spectrum Systems”, *The 27th IEEE International Conference on Advanced Information Networking and Applications (AINA-2013)* Barcelona, Spain, March 25-28, 2013
164. E. Ivannikova, T. Hämäläinen, and K. Luostarinen: “Information Theoretic Approach to Variable Selection in Predictive Models Applied to Paper Machine Data”, *The 18th IEEE Symposium on Computers and Communications (ISCC’13)*, July 7-10, 2013, Split, Croatia.
165. Jari Kellokoski, Joonas Koskinen, Tuomas Rusanen, Pasi Kalliolahti and Timo Hämäläinen, “Proxy Mobile IPv6-based Seamless Handover”, *The 18th IEEE Symposium on Computers and Communications (ISCC’13)*, July 7-10, 2013, Split, Croatia.
166. Jari Kellokoski, Joonas Koskinen, Tuomas Rusanen, Pasi Kalliolahti, and Timo Hämäläinen:” Proxy Mobile IPv6-based Seamless Handover”, *The 13th International Conference on Next Generation Wired/Wireless Advanced Networking, NEW2AN*, August 28-30, 2013, St. Petersburg, Russia
167. Mikhail Zolotukhin and T. Hämäläinen:”Detection of Anomalous HTTP Requests Based on Advanced N-gram Model and Clustering Techniques”, *The 13th International Conference on Next Generation Wired/Wireless Advanced Networking, NEW2AN*, August 28-30, 2013, St. Petersburg, Russia
168. P. Amoli and T. Hämäläinen:”A Real Time Unsupervised NIDS for Detecting Unknown and Encrypted Network Attacks in High Speed Network”, *The 2nd IEEE international workshop on Measurements and networking*, October 7-8, 2013 Naples, Italy
169. M. Zolotukhin and T. Hämäläinen, “Support Vector Machine Integrated with Game-Theoretic Approach and Genetic Algorithm for the Detection and Classification of Malware”. *Proceedings of IEEE Globecom 2013 Workshop - the 1st International Workshop on Security and Privacy in Big Data*, pp. 211-216, 2013, USA
170. M. Zolotukhin and T. Hämäläinen, “Detection of Zero-day Malware Based on the Analysis of Opcode Sequences”. *Proceedings of the 11th Annual IEEE Consumer Communications and Networking Conference (IEEE CCNC)*, pp. 677-682, January, 2014, Las Vegas, USA
171. A. Juvonen and T. Hämäläinen:”An Efficient Network Log Anomaly Detection System using Random Projection Dimensionality Reduction”, *Sixth IFIP International Conference on New Technologies, Mobility and Security, NTMS2014*, March 30th to April 2nd 2014, Zayed University, Dubai, UAE.
172. Mikhail Zolotukhin, Timo Hämäläinen, Tero Kokkonen and Jarmo Siltanen:”Analysis of HTTP requests for anomaly detection of web attacks”, *DASC 2014: The 12th IEEE International Conference on Dependable, Autonomic and Secure Computing 2014*, 24-27 August 2014, Dalian, Liaoning, China

173. Ivannikova, E., Hämäläinen, T., and Luostarinen, K. "Variable group selection based on regression trees: Paper machine case study.", *Proceedings of the 2014 IEEE Conference on Evolving and Adaptive Intelligent Systems (EAIS)* (pp. 686-7460).
174. Mikhail Zolotukhin, Alexander Sayenko, Timo Hämäläinen,"On optimal relay placement for improved performance in non-coverage limited scenarios", *The 17th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems*, September 21-26 2014, Montreal, Canada
175. Visa Vaara, Marko Pitkanen and Timo Hämäläinen, "Wind turbine sensor data analysis and production forecast", *European Modelling Symposium 2014*, 21-23 October 2014, Pisa, Italy
176. Mikhail Zolotukhin, Timo Hämäläinen, Tero Kokkonen and Jarmo Siltanen:"Online Detection of Anomalous Network Flows with Soft Clustering", *the Seven IFIP International Conference on New Technologies, Mobility and Security, NTMS'2015*, 27-29 July 2015, Paris, France
177. Tero Kokkonen; Timo Hämäläinen; Marko Silokunnas; Jarmo Siltanen; Mikhail Zolotukhin; Mikko Neijonen: "Analysis of Approaches to Internet Traffic Generation for Cyber Security Research and Exercise", *em The 15th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems, NEW2AN 2015*, August 26-28, 2015 St. Petersburg, Russia
178. Mikhail Zolotukhin; Timo Hämäläinen; Tero Kokkonen; Antti Niemela; Jarmo Siltanen: "Data mining approach for detection of DDoS attacks utilizing SSL/TLS protocol", *The 15th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems, NEW2AN 2015*, August 26-28, 2015 St. Petersburg, Russia
179. Di Zhang, Chang Zheng, Zolotukhin, Mikhail, Timo Hämäläinen: "Energy Efficient Resource Allocation in Heterogeneous Software Defined Network: A Reverse Combinatorial Auction Approach", *IEEE/CIC International Conference on Communications in China IEEE/CIC ICC'15*, Shenzhen, China, 2-4 November, 2015.
180. Sayenko, A., Hämäläinen, T, "Performance comparison of retransmission mechanisms for multi-hop relay networks". *In 2015 IEEE 11th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob)* (pp. 189-194). IEEE. doi:10.1109/WiMOB.2015.7347960
181. Mikhail Zolotukhin, Alexander Sayenko, Timo Hämäläinen:"On Optimal Placement of Low Power Nodes for Improved Performance in Heterogeneous Networks", *The IEEE/IFIP Network Operations and Management Symposium (NOMS 2016)*, Istanbul, Turkey, 25-29 April 2016.

182. Tero Kokkonen, Jari Hautamki, Jarmo Siltanen, and Timo Hämäläinen: “Model for sharing the information of cyber security situation awareness between organizations”, *23rd International Conference on Telecommunications (ICT 2016)*, Thessaloniki, Greece, 16-18 May 2016
183. Mikhail Zolotukhin, Timo Hämäläinen, Tero Kokkonen and Jarmo Siltanen: “Increasing web service availability by detecting application-layer DDoS attacks in encrypted traffic”, *23rd International Conference on Telecommunications (ICT 2016)*, Thessaloniki, Greece, 16-18 May 2016
184. Di Zhang, Chang Zheng, Timo Hämäläinen: “Reverse Combinatorial Auction based Resource Allocation in Heterogeneous Software Defined Network with Infrastructure Sharing”, *IEEE 83rd Vehicular Technology Conference: VTC2016-Spring*, Nanjing, China, 15-18 May 2016
185. D. Petrov, S. Melnik, T. Hämäläinen: “Asymptotic Presentation of Intrinsic Interference for FBMC/OQAM Signals in Quasi-Static Channels”, *The 22nd European Wireless Conference*, Oulu, Finland, 18-20 May 2016
186. Di Zhang, Zheng Chang, Fei Richard Yuy, Xianfu Chen and Timo Hämäläinen: “A Double Auction Mechanism for Virtual Resource Allocation in SDN-based Cellular Network”, *IEEE 27th Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications - (PIMRC)* 4-7 Sept. 2016, Valencia, Spain
187. D. Petrov, S. Melnik, T. Hämäläinen, “Distributed GNSS-Based Time Synchronization and Applications”, 8th International Congress on Ultra Modern Telecommunications and Control Systems (ICUMT), October 29, 2016, Lisbon, Portugal.
188. Sanjay Kumar, Timo Hämäläinen ja Ari Viinikainen, “Machine Learning Classification Model For Network Based Intrusion Detection System”, 11th International Conference for Internet Technology and Secured Transactions (ICITST), 2016, 5-7 Dec. 2016, Barcelona, Spain
189. Tiina Kovanen, Gil David, and Timo Hämäläinen, “Survey: Intrusion Detection Systems in Encrypted Traffic”; *The 16th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems, NEW2AN 2016*, September 26-28, 2016 St. Petersburg, Russia
190. Mikhail Zolotukhin, Tero Kokkonen, Timo Hämäläinen, and Jarmo Siltanen, “Weighted Fuzzy Clustering for Online Detection of Application DDoS Attacks in Encrypted Network Traffic”, *The 16th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems, NEW2AN 2016*, September 26-28, 2016 St. Petersburg, Russia
191. Elena Ivannikova, Anna Kononova, and Timo Hämäläinen, “Probabilistic Group Dependence Approach For Discovering Overlapping Clusters”, *IEEE International Workshop on Machine Learning For Signal Processing*, September 13-16, 2016 Vietri sul Mare, Salerno, Italy

192. Alexander Sayenko, Mikhail Zolotukhin and Timo Hämäläinen, "On Adaptive Access and Relay Link Resource Allocation for In-band Deployments", *Thirteenth International Symposium on Wireless Communication Systems*, September 20-23, 2016, Poznan, Poland.
193. Alexander Sayenko, Mikhail Zolotukhin, Timo Hämäläinen, "Multi-hop Relays for High Frequency Next Generation Wireless Systems", *24th International Conference on Telecommunications, ICT 2017*, May 3-5, 2017, Limassol, Cyprus
194. Elena Ivannikova, Gil David and Timo Hämäläinen, "Anomaly Detection Approach to Keystroke Dynamics Based User Authentication", *The 22nd IEEE Symposium on Computers and Communications, ISCC'17*, July 3-6, 2017, Heraklion, Crete, Greece
195. Tuomas Tenkanen and Timo Hämäläinen, "Security Assessment of a Distributed, Modbus-based Building Automation System", *IEEE International Symposium on Recent Advances of Computer and Information Technologies 2017 (RACIT-2017)*, Helsinki, Finland, 21-23 August, 2017
196. Elena Ivannikova, Mikhail Zolotukhin and Timo Hämäläinen, "Probabilistic Transition-Based Approach for Detecting Application-Layer DDoS Attacks in Encrypted Software-Defined Networks", *11th International Conference on Network and System Security (NSS-2017)*, Helsinki, Finland, 21-23 August, 2017
197. Paresh Rathod, Timo Hämäläinen, "A Novel Model for Cybersecurity Economics and Analysis", *17th International IEEE Conference on Computer and Information Technology*, Helsinki, Finland, 21-23 August, 2017
198. Pasi Kamppi, Paresh Rathod ja Timo Hämäläinen, "Cybersecurity Safeguards for the Automotive Emergency Response Vehicles", *Proceedings of the 9th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management*, 3, p. 291-298, *Science and Technology Publication*. doi:10.5220/0006587802910298
199. Muhammad Zeeshan Asghar, M., Habib, and Timo Hämäläinen, "Performance evaluation of OpenFlow enabled Commodity Wireless Routers and Raspberry-pi", *The 17th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems, NEW2AN 2017*, August 28-30, 2017 St. Petersburg, Russia
200. Mikhail Zolotukhin; Elena Ivannikova; Timo Hämäläinen, "On Detection of Network-Based Co-Residence Verification Attacks in SDN-driven Clouds", *The 17th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems, NEW2AN 2017*, August 28-30, 2017 St. Petersburg, Russia
201. Viivi Nuojua; Gil David; Timo Hämäläinen, "DNS Tunneling Detection Techniques - Classification, and Theoretical Comparison in Case of a Real APT Campaign", *The 17th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems, NEW2AN 2017*, August 28-30, 2017 St. Petersburg, Russia

202. Alexander Sayenko, Mikhail Zolotukhin, Timo Hämäläinen, “Simulation and Performance Analysis of Frame Structures for Multi-hop Relay Systems”, *IEEE Conference on Standards for Communications and Networking (IEEE CSCN 2017)*, September 18-21, 2017 Helsinki, Finland
203. Sanjay Kumar, Ari Viinikainen ja Timo Hämäläinen “Evaluation of Ensemble Machine Learning Methods in Mobile Threat Detection”, *12th International Conference for Internet Technology and Secured Transactions (ICITST), 2017*, December 11-14, 2017 University of Cambridge, UK.
204. Sanjay Kumar, Ari Viinikainen and Timo Hämäläinen, “: A network-based framework for mobile threat detection”, *The 1st IEEE International Conference on Data Intelligence and Security (ICDIS 2018)*, 8-10 April 2018, South Padre Island, USA
205. Di Zhang, Zheng Chang, Timo Hämäläinen and Weinan Gao, “A Contract based Resource Allocation Mechanism in Wireless Virtualized Network”, *Proc. of 37th IEEE International Conference on Computer Communications (INFOCOM18)*, 15-19 April 2018, Honolulu, USA
206. Olli Vaananen, Timo Hämäläinen, ”“Requirements for Energy Efficient Edge Computing: A Survey”” *The 18th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems NEW2AN 2018*, August 29 - 31, 2018, St.Petersburg, Russia
207. Tero Bodström, Timo Hämäläinen, ”“State of the art literature review on Network Anomaly Detection with Deep Learning””,*The 18th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems NEW2AN 2018*, August 29 - 31, 2018, St.Petersburg, Russia
208. Tero Bodström, Timo Hämäläinen, ”State of the art literature review on Network Anomaly Detection,*The 18th International Conference on Next Generation Wired/Wireless Advanced Networks and Systems NEW2AN 2018*, August 29 - 31, 2018, St.Petersburg, Russia
209. Furqan Jameel, Kumar Sanjay, Chang Zheng, Timo Hämäläinen, Tapani Ristaniemi, 'Operator Revenue Analysis for Device-to-Device Communications Overlaying Cellular Network', *IEEE Conference on Standards for Communications and Networking (CSCN 2018)*, 29-31 October 2018 Paris, France
210. Tero Bodström, Timo Hämäläinen, ”A Novel Method for Detecting APT Attacks by Using OODA Loop and Black Swan Theory,”*International Conference on Computational Data and Social Networks (CSoNet 2018)*, December 18-20, 2018, Shanghai, China.