List of Publications

Marat Zhanikeev, 2021-06-10

Github: https://github.com/maratishe + http://maratishe.github.io/
Slideshare : https://is.gd/WbkKZV   Google Scholar : https://t.ly/SjJN

[1] Books and Bookchapters (newest first, all peer-reviewed)

[1] M.Zhanikeev, *"Converged Information-Centric Spaces based on Wireless Data Hubs"*, Pervasive Computing: Next Generation Platforms for Intelligent Information-Centric Spaces, ISBN 978-0-12-803663-1, Elsevier, p.195-230, April 2016.

[2] M.Zhanikeev, *"Building IoT Ecosystems from Mobile Clouds at Network Edge"*, Internet of Things (IoT) in 5G Mobile Technologies, ISBN 978-3-319-30911-8, Springer, p.197-227, April 2016.

[3] M.Zhanikeev, *"Vehicular Clouds based on GroupConnect and Self Organization"*, Cognitive Vehicular Networks, ISBN 978-1-4987-2192-9, CRC Press, p.169-198, February 2016.

[4] M.Zhanikeev, *"Video Streaming overs Wireless Channels -- 4G and Beyond"*, Advances in Mobile Computing and Communications: 4G and Beyond, ISBN 978-1-4987-0113-6, CRC Press, p.319-282, February 2016.

[5] M.Zhanikeev, *"Opportunistic Multiconnect with P2P WiFi and Cellular Providers"*, Advances in Mobile Computing and Communications: 4G and Beyond, ISBN 978-1-4987-0113-6, CRC Press, p.271-318, February 2016.

[6] M.Zhanikeev, *"Circuit Emulation for Big Data Transfers in Clouds"*, Networking for Big Data, CRC, ISBN 978-1482263497, p.359-392, September 2015.

[7] M.Zhanikeev, *"Streaming Algorithms for Big Data Processing on Multicore"*, Big Data: Algorithms, Analytics, and Applications, ISBN 978-1-4822-4055-9, CRC, p.215-240, February 2015.

[8] M.Zhanikeev, *"Methods and Algorithms for Fast Hashing in Data Streaming"*, Cryptography: Algorithms and Implementations Using C++, ISBN 978-1-4822-2890-8, CRC, p.299-334, November 2014.

[9] M.Zhanikeev, *"Multi-Source Stream Aggregation in the Cloud"*, Advanced Content Delivery, Streaming, and Cloud Services, ISBN 978-1-118-57521-5, Wiley, p.219-242, September 2014.

[10] Y.Tanaka, M.Zhanikeev, *"Active Network Measurement: Theory, Methods, and Tools"*, ITU Association of Japan, ISBN 978-4916128072, Tokyo, June 2009.

[2] Journal Papers (newest first, all peer-reviewed)

[1] M.Zhanikeev, *"A Method for Secure Wireless Grouping at Network Edge"*, Wireless Personal Communications, *(in print)*. **(IF:1.2)**

[2] M.Zhanikeev, *"On a Formal Specification of Big Data Processing Suitable for Distributed Storage and Streaming"*, International Journal of Innovation Management (IJIM), vol.V8N1, p.43-46, June 2020. **(SJR:1.3)**

[3] M.Zhanikeev, *"The Last Man Standing Technique for Proof-of-Location in IoT Infrastructures at Network Edge"*, Wireless Communications and Mobile Computing, article no.7317019, 12 pages, June 2019. **(IF:0.9)**

[4] M.Zhanikeev, *"Penalty Migration as a Performance Signaling Method in Energy-Efficient Clouds"*, Annals of Telecommunications, vol.72, p.1-13, May 2017. **(IF:0.722)**

[5] M.Zhanikeev, *"Improving Performance in Dense Wireless Spaces by Controlling Bulk Traffic"*, Mobile Information Systems (MIS), vol.2017, article no.8013971, p.1-11, October 2016. **(IF:1.462)**

[6] M.Zhanikeev, "*Fog Caching and a Trace-Based Analysis of its Offload Effect*", International Journal of Information Technologies and Systems Approach (IJITSA), vol.10(2), p.1-19, July 2016. **(IF:0.39)**

[7] M.Zhanikeev, "*Performance Management of Cloud Populations via Cloud Probing*", IPSJ Journal of Information Processing, vol.24, no.1, p.99-108, January 2016. **(SJR:0.3)**

[8] M.Zhanikeev, "*DiffHub: An Efficient Cloud Sync Technology based on Binary Diffs*", IPSJ Journal of Information Processing, vol.23, no.5, p.683-692, November 2015. **(SJR:0.3)**

[9] M.Zhanikeev, "*A Cloud Visitation Platform to Facilitate Cloud Federation and Fog Computing*", IEEE Computer, vol.48, issue 5, p.80-83, May 2015. **(IF:1.438)**

[10] M.Zhanikeev, "*How variable bitrate video formats can help P2P streaming boost its reliability and scale*", Springer Journal of Electronic Commerce Research, vol.15(1), p.22-47, February 2015. **(IF:1.632)**

[11] M.Zhanikeev, "*A holistic community-based architecture for measuring end-to-end QoS at data centres*", Inderscience International Journal of Computational Science and Engineering (IJCSE), vol.10, no.3, p.315-324, January 2015. **(IF:0.59)**

[12] M.Zhanikeev, Y.Tanaka, "*A Graphical Method for Detection of Flash Crowds in Traffic*", Springer Telecommunication Systems Journal, vol.57, issue 1, p.91-105, September 2014. **(IF:0.705)**

[13] M.Zhanikeev, "*A lock-free shared memory design for high-throughput multicore packet traffic capture*", International Journal of Network Management (IJNM), vol.24, p.304-317, June 2014. **(IF:0.517)**

[14] M.Zhanikeev, "*A Method for Reliable P2P Video Streaming using Variable Bitrate Video Formats*", JSSST Journal of Computer Software, vol.31, p.234-245, May 2014.

[15] M.Zhanikeev, "*Searching for the Most Cost Effective Method in Browser-Based Visualizations: Screen Size, Pinch to Scale, Search and Browse*", The Journal of the Institute of Image Electronics Engineers of Japan (IIEEJ), vol.43, no.1, February 2014.

[16] M.Zhanikeev, "*On How Smart Cities Can Improve Social Utility of Their Citizens' Commutes*", IPSJ Journal of Information Processing, vol.22, no.2, p.253-262, April 2014. **(SJR:0.3)**

[17] M.Zhanikeev, "*Optimizing Virtual Machine Migration for Energy-Efficient Clouds*", IEICE Transactions on Communications, vol.E97-B, no.2, p.450-458, February 2014. **(IF:0.252)**

[18] M.Zhanikeev, "*Experiments with application throughput in a browser with full HTML5 support*", IEICE Communications Express, vol.2, no.5, p.167-172, May 2013. **(IF:0.320)**

[19] J.Hong, C.Hong, Y.Kiriha, M.Zhanikeev, "*Managing Clouds, Smart Networks and Services: A Report on APNOMS 2011*", Journal of Network and Systems Management, vol.20, issue 1, p.134-142, March 2013. **(IF:0.796)**

[20] M.Zhanikeev, Y.Tanaka, "*Modelling Network Performance of End Hosts*", IEICE Transactions on Information and Systems, vol.E95-D, no.7, p.1872-1881, July 2012. **(IF:0.245)**

[21] M.Zhanikeev, Y.Tanaka, "*A Framework for Detection of Traffic Anomalies Based on IP Aggregation*", IEICE Transactions on Information and Systems, vol.E92-D, no.1, p.16-23, January 2009. **(IF:0.39)**

[3] International Conference Proceedings (newest first, all peer-reviewed)

[1] N.Kuge, M.Zhanikeev, "*Educational Content Delivery in Mixed Online/Offline University Campuses*", Future Technologies Conference (FTC) (accepted, in print), October 2021.

[2] M.Zhanikeev, "*Modeling Components for Cut-Through Performance Analysis of Network Switches*", 16th IEEE International Conference on Network and Service Management (CNSM), November 2020.

[3] M.Zhanikeev, "*A jQuery-like Platform for Standardized Dataset Processing Logic*", International Conference on Innovation and Management, Sapporo, Japan, February 2020.

[4] M.Zhanikeev, "*Relative Wireless Positioning for Multiple Client Devices Using Delta Triangulation*", 9th International Conference on Electronics, Communications, and Networks (CECNet) and Frontiers in Artificial Intelligence and Applications, vol.320, IOS Press, October 2019.

[5] M.Zhanikeev, "*A Method for Secure Wireless Grouping at Network Edge*", 4th IEEE Cyber Science and Technology Congress (CyberSciTech), Fukuoka, Japan, August 2019.

[6] M.Zhanikeev, "*Subflow Cut-Through Optimization with Migration using N-by-M Circuit Switchboard*", 7th IEEE International Conference on Cloud Networking (CloudNet), Tokyo, Japan, October 2018.

[7] M.Zhanikeev, "*Ultrasound Relative Positioning for IoT Devices in Dense Wireless Spaces*", 24th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications

(RTCSA), Hakodate, Japan, August 2018.

[8] <u>M.Zhanikeev</u>, *"Towards a Packet Traffic Genome Project as a Method for Realtime Sub-Flow Traffic Analysis"*, 42nd IEEE International Conference on Computers, Software, and Applications (COMPSAC), Tokyo, Japan, July 2018.

[9] <u>M.Zhanikeev</u>, *"What if We Atomize Student Data and Apps and Put Them on Docker Containers?"*, IBM Cloud Academy Conference, Tokyo, Japan, May 2018.

[10] <u>M.Zhanikeev</u>, *"Theory and Practice for Fog Infrastructure based on Standalone Cloudified IoT Boxes"*, IEEE TRON Symposium (TRONSHOW), December 2017.

[11] <u>M.Zhanikeev</u>, *"Large-Scale Crowdsourcing by Vehicular Data Packets in a Sparse Roadside Infrastructure"*, 10th IEEE Conference on Service-Oriented Computing and Applications (SOCA), Kanazawa, Japan, November 2017.

[12] <u>M.Zhanikeev</u>, *"The Switchboard Optimization Problem and Heuristics for Cut-Through Networking"*, The 23rd IEEE International Symposium on Local and Metropolitan Area Networks (LANMAN), Osaka, Japan, June 2017.

[13] <u>M.Zhanikeev</u>, *"Optimization Strategies for the Crowdsourced Processing of Large Tasks in the Cloud"*, 1st EAI International Conference on Big Data and Cyber-Physical-Social Computing (BIGDATACPS), Nagasaki, Japan, November 2016.

[14] <u>M.Zhanikeev</u>, *"Volume and Irregularity Effects on Massively Multicore Packet Processors"*, Network Operations and Management Symposium (APNOMS), Kanazawa, Japan, October 2016.

[15] <u>M.Zhanikeev</u>, *"Fog Cloud Caching at Network Edge via Local Hardware Awareness Spaces"*, 36th IEEE International Conference on Distributed Computing Systems (ICDCS 2016), Hakodate, Japan, p.184-188, June 2016.

[16] <u>M.Zhanikeev</u>, *"How to Build Infrastructureless Information-Centric Wireless Spaces using Autonomous Hubs"*, 2nd International Conference on IoT in Urban Space (Urb-IoT), Tokyo, Japan, p.102-104, May 2016.

[17] <u>M.Zhanikeev</u>, *"Multidimensional Classification Automation with Human Interface based on Metromaps"*, 4th International Congress on Advanced Applied Infomatics, Okayama, Japan, p.534-539, July 2015.

[18] <u>M.Zhanikeev</u>, *"A New VNE Method for More Responsive Networking in Many-to-Many Groups"*, 7th International Conference on Ubiquitous and Future Networks (ICUFN), Sapporo, Japan, p.438-443, July 2015.

[19] <u>M.Zhanikeev</u>, *"A Cloud Visitation Platform for Federated Services at Network Edge"*, CISSE Online Conference, December 2014.

[20] <u>M.Zhanikeev</u>, *"On Context Management Using Metro Maps"*, 7th IEEE International Conference on Service Oriented Computing and Applications (SOCA), Matsue, Japan, p.309-313, November 2014.

[21] <u>M.Zhanikeev</u>, *"Replayable BigData for Multicore Processing and Statistically Rigid Sketching"*, Internet Conference, Hiroshima, Japan, November 2014.

[22] <u>M.Zhanikeev</u>, *"Coins in Cloud Drives Can Use OAuth for Micropayments and Resource Metering Alike"*, 9th International Conference on Future Internet Technologies (CFI), Tokyo, Japan, June 2014.

[23] <u>M.Zhanikeev</u>, *"A Software Design and Algorithms for Multicore Capture in Data Center Forensics"*, 9th ACM Symposium on Information, Computer, and Communication Security Workshops (ASIACCS/SFCS), Okayama, Japan, p.11-18, June 2014.

[24] <u>M.Zhanikeev</u>, *"A New Practical Design for Browsable Over-the-Network Indexing"*, International Conference on Information Science, Electronics and Electrical Engineering (ISEEE), Sapporo, Japan, p.1686-1690, April 2014.

[25] <u>M.Zhanikeev</u>, *"Virtual Wireless User: A Practical Design for Parallel MultiConnect Using WiFi Direct in Group Communication"*, 10th International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous), Springer LNICS vol.131, Tokyo, Japan, p.782-793, December 2013. **(SJR:0.2)**

[26] <u>M.Zhanikeev</u>, *"A Method for Extremely Scalable and Low Demand Live P2P Streaming based on Variable Bitrate"*, 1st International Symposium on Computing and Networking (CANDAR, former ICNC), Matuyama, Japan, p.461-467, December 2013.

[27] <u>M.Zhanikeev</u>, *"End-to-End Network Performance Estimation Using Signal Complexity"*, International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS), Okayama, Japan, p.73-78, November 2013.

[28] M.Zhanikeev, H.Watanabe, "*A Model and Simulation of EV Use in Environments with V2H and Battery Replacement Infrastructure*", ITS World Congress, Tokyo, Japan, October 2013.

[29] M.Zhanikeev, "*Experiments with Practical On-Demand Multi-Core Packet Capture*", 15th Asia-Pacific Network Operations and Management Symposium (APNOMS), Nagasaki, Japan, p.1-3, September 2013.

[30] M.Zhanikeev, "*A Home Gateway Box with Meter, Probe and L2 QoS Policy Edge*", IEEE Conference on Computers, Software and Applications (COMPSAC), Kyoto, Japan, p.550-555, July 2013.

[31] M.Zhanikeev, "*A Practical Software Model for Content Aggregation in Browsers using Recent Advances in HTML5*", IEEE Conference on Computers, Software and Applications (COMPSAC), Kyoto, Japan, p.151-156, July 2013.

[32] M.Zhanikeev, R.Yamamoto, K.Yamori, Y.Tanaka, "*A Method for Side Splitting of Packet Traces*", 13th Asia-Pacific Network Operation and Management Symposium (APNOMS), Taipei, Taiwan, p.1-7, September 2011.

[33] J.O.Song, M.Zhanikeev, O.Yoshie, Y.Tanaka, "*An Efficient Model for Remote Display Service of Cloud Computing*", International Workshop on Smart Info-Media Systems in Asia (SISA), Manila, Philippines, September 2010.

[34] M.Zhanikeev, Y.Tanaka, "*Application of Graph Theory to Clustering in Delay Space*", 8th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT), Paper No.B-7-2, Kuching, Malaysia, p.1-6, June 2010.

[35] D.P.Van, M.Zhanikeev, Y.Tanaka, "*Traffic Trace Engineering*", Management Enabling the Future Internet for Changing Business and New Computing Services, Springer LNCS vol.5787, Jeju, Korea, p.1-10, September 2009. **(SJR:0.3)**

[36] M.Zhanikeev, Y.Tanaka, "*Lightweight Traffic Monitoring and Analysis Using Video Compression Techniques*", Management Enabling the Future Internet for Changing Business and New Computing Services, Springer LNCS vol.5787, Jeju, Korea, p.92-101, September 2009. **(SJR:0.3)**

[37] M.Randriamananjara, M.Zhanikeev, Y.Tanaka, "*Estimating Throughput Reliability on Long End-to-End Paths*", 12th Asia-Pacific Network Operations and Management Symposium (APNOMS), Paper No. I2-1, Jeju, Korea, September 2009. **(SJR:0.3)**

[38] M.Yap, M.Zhanikeev, Y.Tanaka, "*A Validity Tester for Active Measurement Tools*", 11th International Conference on Advanced Communication Technology (ICACT), Phoenix Park, Korea, p.305-310, February 2009.

[39] D.Van, M.Zhanikeev, Y.Tanaka, "*Effective High Speed Traffic Replay Based on IP Space*", 11th International Conference on Advanced Communication Technology (ICACT), Phoenix Park, Korea, p.151-156, February 2009.

[40] M.Zhanikeev, Y.Tanaka, T.Ogishi, "*Probing Based Topology Inference for Large Scale Community Networks*", Management of Convergence Networks and Services, Springer LNCS vol.5297, Seoul, Korea, p.92-101, February 2009. **(SJR:0.3)**

[41] E.Ishikawa, S.Xu, M.Zhanikeev, Y.Tanaka, "*Selection of FDL Slot Length in Optical Packet Switching Networks with Fibre Delay Lines*", 7th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT), Bandos, Maldives, p.214-219, April 2008.

[42] M.Zhanikeev, Y.Tanaka, "*Modelling and Analysis of End-to-End Network Performance*", 7th Asia-Pacific Symposium on Information and Telecommunication Technologies (APSITT), Bandos, Maldives, p.141-146, April 2008.

[43] T.Q.Le, M.Zhanikeev, Y.Tanaka, "*Detection and Identification of Neptune Attacks and Flash Crowds*", Management of Convergence Networks and Services, Springer LNCS vol.4773, Busan, Korea, p.571-574, September 2007. **(SJR:0.3)**

[44] M.Yap, M.Zhanikeev, Y.Tanaka, "*Point of Reference in Perception of Network Performance by Active Probing*", Management of Convergence Networks and Services, Springer LNCS vol.4773, Busan, Korea, p.205-214, September 2007. **(SJR:0.3)**

[45] M.Zhanikeev, Y.Tanaka, "*Quantitative Analysis of Temporal Patterns in Loosely Coupled Active Measurement Results*", Management of Convergence Networks and Services, Springer LNCS vol.4773, Busan, Korea, p.415-424, September 2007. **(SJR:0.3)**

[46] T.Q.Le, M.Zhanikeev, Y.Tanaka, "*Methods of Distinguishing Flash Crowds from Spoofed DoS Attacks*", 3rd EuroNGI Conference on Next Generation Internet Networks (NGI), Trondheim, Norway, p.167-173, May 2007.

[47] T.Q.Le, M.Zhanikeev, Y.Tanaka, "*Anomaly Identification Based on Flow Analysis*", IEEE TENCON (Region 10 Conference), Hong Kong, China, Paper No.SC1.3, 4 pages, November 2006.

[48] W.Tan, <u>M.Zhanikeev</u>, Y.Tanaka, "*ABshoot: A Reliable and Efficient Scheme for End-to-End Available Bandwidth Measurement*", IEEE TENCON (Region 10 Conference), Hong Kong, China, Paper No.DN3.3, 4 pages, November 2006.

[49] <u>M.Zhanikeev</u>, Y.Tanaka, "*Temporal Patterns in Size and Rate of Traffic Flows*", 12th International Telecommunications Network Strategy and Planning Symposium (Networks), New Delhi, India, Technical Session 4, 6 pages, November 2006.

[50] W.Tan, <u>M.Zhanikeev</u>, Y.Tanaka, "*Rate-Based and Gap-Based Available Bandwidth Estimation Techniques in Cross-Traffic Context*", Management of Convergence Networks and Services, Springer LNCS vol.4238, Busan, Korea, p.73-81, September 2006. **(SJR:0.3)**

[51] <u>M.Zhanikeev</u>, Y.Tanaka, "*Temporal Patterns and Properties in Multiple-Flow Interactions*", Management of Convergence Networks and Services, Springer LNCS vol.4238, Busan, Korea, p.92-101, September 2006. **(SJR:0.3)**

[52] T.Q.Le, <u>M.Zhanikeev</u>, Y.Tanaka, "*Detecting and Identifying Network Anomalies by Component Analysis*", Management of Convergence Networks and Services, Springer LNCS vol.4238, Busan, Korea, p.501-504, September 2006. **(SJR:0.3)**

[53] <u>M.Zhanikeev</u>, S.Xu, Y.Tanaka, "*Active Performance Measurement for IP over All-Optical Networks*", 2nd IEEE and IFIP International Conference in Central Asia on Internet (ICI), Tashkent, Uzbekistan, Session 7, 5 pages, September 2006.

[54] <u>M.Zhanikeev</u>, Y.Tanaka, "*A Testbed for Agent-Based Multi-Purpose Extensible Active Measurement*", 2nd International IEEE/Create-Net Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (TridentCom), Barcelona, Spain, Track 2, Session 4, 9 pages, March 2006.

[55] <u>M.Zhanikeev</u>, J.McKeown, Y.Tanaka, "*Data Sources for Proactive Network Management*", 8th Asia-Pacific Network Operations and Management Symposium (APNOMS), Okinawa, Japan, p.410-421, September 2005.

[56] <u>M.Zhanikeev</u>, Y.Tanaka, "*Towards the Improvement of Performance Anomaly Prediction*", 1st IEEE and IFIP International Conference in Central Asia on Internet (ICI), Bishkek, Kyrgyz Republic, Session 7, 5 pages, September 2005.

[57] <u>M.Zhanikeev</u>, Y.Tanaka, "*Network Performance Optimization through Measurement*", International Network Optimization Conference (INOC), Lisbon, Portugal, p.265-272, March 2005.

[58] <u>M.Zhanikeev</u>, Y.Tanaka, "*Network Management Using Active Probing*", 12th International Conference on Telecommunication Systems, Modeling and Analysis (ICTSM), Monterey, USA, p.236-245, July 2004.

Apart from the above, I omitted **60 local technical conference**, **108 local technical meeting** presentations , and **4 invited** speeches.