

PUBLICATIONS

Dr. Muhammad Umer Farooq

Journal Papers

M. O. Farooq, C.J. Sreenan, K.N. Brown and T. Kunz. Design and Analysis of RPL Objective Functions for Multi-Gateway Low-Power and Lossy Networks," Ad Hoc Networks, vol. 65, pp. 78 -90, October 2017. (To Appear).

M. O. Farooq, C.J. Sreenan, K.N. Brown. Capacity and contention-based joint routing and gateway selection for machine-type communications. Ad Hoc Networks, Vol. 62(C), pp. 35-49, (DOI: 10.1016/j.adhoc.2017.04.006), July 2017

M. O. Farooq, T. Kunz, Cormac J. Sreenan, and Kenneth N. Brown, "Evaluation of Available Bandwidth as a Routing Metric for Delay-Sensitive IEEE 802.15.4-based Ad-Hoc Networks", Elsevier Ad Hoc Networks. Vol.37, pp. 526-542. February 2016.

M. O. Farooq and T. Kunz, "Impact of Route Length on the Performance of Routing and Flow Admission Control Algorithms in Wireless Sensor Networks", IET Wireless Sensor Systems. Accepted July, 2015.

M. O. Farooq and T. Kunz, "BandEst: Measurement-based Available Bandwidth Estimation and Flow Admission Control Algorithm for Ad-hoc IEEE 802.15.4-based Wireless Multimedia Networks", International Journal of Distributed Sensor Networks, vol. 2015, article ID 539048.

M. O. Farooq and T. Kunz, "Contiki-based IEEE 802.15.4 Channel Capacity Estimation and Suitability of its CSMA-CA MAC Layer Protocol for Real-Time Multimedia Applications", Mobile Information Systems, vol. 2015, article ID 398637.

M. O. Farooq and T. Kunz, "Wireless Sensor Networks Testbeds and State-of-the-Art Multimedia Sensor Nodes", Applied Mathematics and Information Sciences Journal vol. 8 no. 3, 2014.

M. O. Farooq, M. St-Hilaire, and T. Kunz, "Cross-Layer Architecture for QoS Provisioning in Wireless Multimedia Sensor Networks", KSII Transactions on Internet and Information Systems vol. 6 no. 1, 2012.

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M. O. Farooq and S. Aziz, "Differentiated Services based Admission Control and Multi-path Routing for IPv6", Journal of Information Processing Systems vol. 5 no.2, 2009.

Conference Papers

M.O. Farooq and T. Kunz. "Benefits of the IEEE 802.15.4 MAC Layer Acknowledgements in Ad-Hoc Networks: an Experiential Analysis", in proc. of International Conference on Selected Topics in Mobile & Wireless Networking (MoWNet 2016).

M.O. Farooq, Cormac J. Sreenan, and Kenneth N. Brown, "Research Challenges in 5G Networks: a HetNets Perspective", in proc. of 19th International Conference on Innovations in Clouds, Internet and Networks (ICIN 2016).

M.O. Farooq, Cormac J. Sreenan, Kenneth N. Brown, and Thomas Kunz, "RPL-based Routing Protocols for Multi-Sink Wireless Sensor Networks", To Appear In Proc. of 11th IEEE International Conference on Wireless and Mobile Computing, Networking and Communication (WiMob 2015).

M.O. Farooq and T. Kunz, "Key Factors for a Proper Available-Bandwidth-based Flow Admission Control in Ad-hoc Wireless Sensor Networks", In Proc. of 8th International Workshop on Wireless Sensor, Actuator and Robot Networks (WiSARN 2014), in conjunction with ADHOC-NOW.

M.O. Farooq and T. Kunz, "Available-bandwidth-based Routing in IEEE 802.15.4-based Ad-hoc Networks: Proactive vs. Opportunistic Technique", In Proc. of 28th IEEE International Conference on Advanced Information Networking and Applications (AINA 2014).

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