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Biography

Maurice Khabbaz received his Ph.D. degree in Electrical Engineering in 2012 from Concordia University in Montreal, Canada. He received his M.Sc.E. and B.E. degrees respectively in 2008 and 2006 from the Lebanese American University in Byblos, Lebanon. Currently, he serves as a Distinguished Associate Professor of Electrical, Computer and Communications Engineering at the Notre-Dame University (NDU) of Louaizeh in Lebanon. In 2015, Dr. Khabbaz founded the NDU CISCO Networking Academy for which he serves as the Director. After serving as the Lead Guest Editor for the Blockchain-Enabled IIoT Special Issue published in the IEEE INTERNET OF THINGS MAGAZINE (IEEE IoTM) in 2019, Dr. Khabbaz was invited to join the magazine's esteemed editorial board as a permanent Associate Editor. Later in November 2020, he was appointed as the Interim Editor-In-Chief for the IEEE IoTM for a period of two months after which he was officially elected as the IEEE IoTM's Associate Editor-In-Chief as of January 2021. In addition, Dr. Khabbaz serves as the Area Editor of Wireless Networks II for the IEEE COMMUNICATIONS LETTERS as well as an Associate Editor for the IEEE TRANSACTIONS ON NETWORK AND SERVICE MANAGEMENT, the IEEE ACCESS and the IEEE OPEN JOURNAL OF THE COMMUNICATIONS SOCIETY. He is a Senior Member of the IEEE as well as a member for the American Society for Engineering Education. His research interests are in the areas of the Next Generation Carrier Grade Networks (5G and beyond), Internet of Things, Cloud/Datacenter Networking, Intelligent Transportation Systems, Vehicular Networks, Wireless Networking, Wireless Communication Systems, Software-Defined Networking, Network Function Virtualization, Dynamic Spectrum Access, Delay-/Disruption-Tolerant Networking, Modelling and Performance Analysis, Network Optimization and Queueing Theory.

Peer-reviewed International Journal Papers:

- M. Khabbaz, C. Assi and S. Sharafeddine, «Multi-Hop V2U Path Availability Analysis in UAV-Assisted Vehicular Networks,» IEEE Internet of Things Journal, Vol. PP, Issue No. 99, December 2020.
- M. Khabbaz, J. Antoun, S. Sharafeddine and C. Assi, «Modelling and Delay Analysis of Intermittent Vehicle-to-UAV Communication In Secluded Areas,» IEEE Transactions on Wireless Communications, Vol. PP, Issue No. 99, February 2020.
- I. Sorkhoh, D. Ebrahimi, C. Assi, S. Sharafeddine and M. Khabbaz, «An Infrastructure-Assisted Workload Scheduling for Computational Resources Exploitation in Fog-Enabled Vehicular Network,» IEEE Internet of Things Journal, Vol. PP, Issue No. 99, January 2020.
- M. Khabbaz, «Modelling and Analysis Of A Novel Vehicular Mobility Management Scheme To Enhance Connectivity In Vehicular Environments,» IEEE Access, Vol. 7, August 2019.
- L Qu, C. Assi, M. Khabbaz and Y. Ye, «Reliability-Aware Service Function Chaining With Function Decomposition and Multipath Routing,» IEEE Transactions on Network and Service Management, Vol. 68, Issue No. 7, December 2019.
- M. Khabbaz and H. Artail, «Deadline-Constrained Connection Request Scheduling In Mobile Relay-Assisted LTE Networks,» IEEE Transactions on Vehicular Technology, Vol. PP, Issue No. 99, May 2019.

- M. Khabbaz, J. Antoun and C. Assi, «Modelling and Performance Analysis of UAV-Assisted Vehicular Networks,» IEEE Transactions on Vehicular Technology Special Issue on Vehicle Connectivity and Automation Using 5G Networks, Vol. 68, Issue No. 9, April 2019.
- R. Atallah, C. Assi, W. Fawaz, H. Mosaddek and M. Khabbaz, «Optimal Supercharge Scheduling of Electric Vehicles: Centralized Versus Decentralized Methods,» IEEE Transactions on Vehicular Technology, Vol. 67, Issue No. 9, May 2018.
- R. Atallah, C. Assi and M. Khabbaz, «Scheduling The Operation Of A Connected Vehicular Network Using Deep Reinforcement Learning,» IEEE Transactions on Intelligent Transportation Systems, Vol. PP, Issue No. 99, April 2018.
- L. Qu, M. Khabbaz and C. Assi, , «Reliable Service Chaining For Next Generation Carrier Grade Networks,» IEEE Journal On Selected Areas In Communications, Vol. PP, Special Issue on Network Softwarization and Enablers, April 2018.
- W. Fawaz, R. Atallah, C. Assi and M. Khabbaz, «Unmanned Aerial Vehicles As Store-Carry-Forward Nodes For Vehicular Networks,» IEEE Access, Vol. 5, Issue No. 1, October 2017.
- M. Khabbaz, K. Shaban and C. Assi, «Delay-Aware Flow Scheduling In Low Latency Enterprise Datacenter Networks : Modelling and Performance Analysis,» IEEE Transactions on Communications, Vol. 65, Issue No. 5, May 2017.
- L. Qu, C. Assi, K. Shaban and M. Khabbaz, « READ: A Novel Reliability-Aware And Delay-constrained Optimization Framework For NFV-Enabled Enterprise Datacenter Networks, » IEEE Transactions on Network Service Management, Vol. PP, Issue No. 99, June 2017.
- R. Atallah, M. Khabbaz and C. Assi, «Multi-hop Vehicle-to-Infrastructure Communications: A Feasibility Study, Modelling and Performance Analysis, » IEEE Transactions on Vehicular Technology, Vol. 66, Issue No. 3, pp. 2801 – 2810, July 2016.
- R. Atallah, M. Khabbaz and C. Assi, «Energy Harvesting in Vehicular Networks: A Contemporary Survey,» IEEE Wireless Communications Magazine, Vol. 23, Issue No. 2, pp. 70 – 77, April 2016.
- M. Khabbaz and C. Assi, «Modelling And Analysis Of A Novel Deadline- Aware Scheduling Scheme For Cloud Computing Data Centers,» IEEE Transactions on Cloud Computing, Vol. PP, Issue No. 99, September 2015.
- M. Khabbaz, R. Atallah and C. Assi, «Vehicular Networking: A Comprehensive Survey On Spectrum Access Technologies and Persisting Challenges,» Elsevier Journal of Vehicular Communications, Vol. 2, Issue No. 3, pp. 129 – 149, July 2015.
- M. Khabbaz, M. Hasna, C. Assi, A. Ghayeb and W. Fawaz, «Modelling, Analysis and Performance Improvement of An SRU's Access Request Queue in Multichannel V2I Communications,» Elsevier Journal of Pervasive and Mobile Computing, Vol. 21, pp. 92 – 102, August 2015.
- R. Atallah, M. Khabbaz and C. Assi, «Modelling and Performance Analysis of Medium Access Control Schemes for Drive-Thru Internet Access Provisioning Systems, » IEEE Transactions on Intelligent Transportation Systems, Vol. 16, Issue No. 6, pp. 3238 - 3248, May 2015.
- R. Atallah, M. Khabbaz and C. Assi, «A Novel Drive-Thru Internet Channel Access Scheme,» IEEE Communications Letters, Vol. 18, Issue No. 6, pp. 1047 – 1050, April 2014.
- M. Khabbaz, M. Hasna, C. Assi and A. Ghayeb, «Modelling and Analysis of An Infrastructure Service Request Queue in Multi-channel V2I Communications,» IEEE Transactions on Intelligent Transportation Systems, Vol. 15., Issue No. 3, pp. 1155 – 1167, November 2013.
- W. Fawaz, R. Atallah and M. Khabbaz, «A First Step Towards the Resolution of The Starvation Problem In Multi-Point-to-Point ICRCNs,» IEEE Communications Letters, Vol. 17, Issue No. 11, pp. 2104 – 2107, November 2013.
- M. Khabbaz, C. Assi and A. Ghayeb, «Modelling and Analysis of DSA-based Vehicle-to-Infrastructure Communication Systems,» IEEE Transactions on Intelligent Transportation Systems, Vol. 14, Issue No. 3, pp. 1186 – 1196, September 2013.
- M. Khabbaz, H. Alazemi and C. Assi, «Modeling and Delay Analysis of a Retransmission-Based Bundle Delivery Scheme for Intermittent Roadside Communication Networks», IEEE Transactions on Intelligent Transportation Systems, Vol. 14, Issue No. 2, pp. 700 – 708, June 2013.
- M. Khabbaz, W. Fawaz and C. Assi, «A Probabilistic And Traffic-Aware Bundle Release Scheme For Vehicular Intermittently Connected Networks,» IEEE Transactions on Communications, Vol. 60, Issue No. 11, pp. 3396 – 3406, November 2012.
- M. Khabbaz, H. Alazemi and C. Assi, «Delay-Aware Data Delivery In Vehicular Intermittently Connected Networks,» IEEE Transactions on Communications, Vol. 61, Issue No. 3, pp. 1134 – 1143, March 2013.
- M. Khabbaz, W. Fawaz and C. Assi, «A Simple Free-Flow Traffic Model for Vehicular Intermittently Connected Networks,» IEEE Transactions on Intelligent Transportation Systems, Vol. 13, Issue No. 3, pp. 1312 – 1326, September 2012.
- M. Khabbaz, W. Fawaz and C. Assi, «Modelling and Delay Analysis of Intermittently Connected Roadside Communication Networks,» IEEE Transactions on Vehicular Technology, Vol. 61, Issue No. 6, pp. 2698 – 2706, July 2012.

- M. Khabbaz, C. Assi and W. Fawaz, «Disruption-tolerant Networking: A Comprehensive Survey on Recent Development and Persisting Challenges,» IEEE Communications Surveys and Tutorials, Vol. 14, Issue No. 2, pp. 607 – 640, June 2012.
- M. Khabbaz, W. Fawaz and C. Assi, «Which Vehicle To Select?,» IEEE Communications Letters, Vol. 16, Issue No. 6, pp. 812 – 815, June 2012.
- M. Khabbaz, W. Fawaz and C. Assi, «Probabilistic Bundle Relaying Schemes in Two-Hop Vehicular Delay Tolerant Networks,» IEEE Communications Letters, Vol. 15, Issue No. 3, pp. 281 – 283, March 2011.
- W. Fawaz and M. Khabbaz, «Incorporating Mutation Probability into Priority-Aware Protection in Optical Networks,» IEEE Communications Letters, Vol. 13, Issue No. 11, pp. 865 – 857, November 2009.

International Journal/Magazine Special Issues / Guest Editorials

- M. Khabbaz (Lead Guest Editor), O. Dobre, J. J.-P.-C. Rodrigues, P. H. Ho, M. Abdallah and S. Jabbar, «Blockchain-Enabled Industrial Internet of Things: Advances, Applications, and Challenges,» IEEE Internet of Things Magazine, June 2020

Peer-reviewed International Conference Papers

- M. Khabbaz and H. Artail, «Deadline-Aware UE Service Scheduling In Mobile-Relay-Augmented Cellular Networks,» IEEE Wireless Communications and Networking Conference (WCNC), Marrakech, Morocco, April 2019.
- M. Khabbaz, E. Saad and J. Kodsi, «A Novel Vehicular Traffic Control Scheme For Connectivity Improvement in VANETs,» IEEE Global Communications Conference (GLOBECOM), Abu Dhabi, U.A.E., December 2018.
- R. Atallah, M. Khabbaz and C. Assi, «Deep Reinforcement Learning-based Scheduling For Roadside Communication Networks,» IEEE/IFIP International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt), Paris, France, February 2017.
- L. Qu, C. Assi, K. Shaban and M. Khabbaz, «Reliability-Aware Service Provisioning in NFV-enabled Enterprise Datacenter Networks,» IEEE International Conference on Network and Service Management (CNSM), Montreal, Canada, November 2016.
- M. Khabbaz, K. Shaban and C. Assi, «Prioritizing Deadline-Constrained Data Flows In Cloud Datacenter Networks,» ACM Symposium on Applied Computing (SAC), Pisa, Italy, April 2016.
- M. Khabbaz and C. Assi, «Impact of Job Deadlines on The QoS Performance of Cloud Data Centers, » IEEE International Conference on Cloud Networking (CLOUDNET), Niagara Falls, Canada, October 2015.
- R. Atallah, M. Khabbaz and C. Assi, «Throughput Analysis of IEEE 802.11p-based Multi-Hop V2I Communications,» IEEE World of Wireless Mobile and Multimedia Networks (WoWMoM) Workshop on Smart Vehicles, Boston, M.A, U.S.A, May 2015.
- R. Atallah, M. Khabbaz and C. Assi, «Modelling of Multi-Hop Inter-Vehicular Path Formation For Connecting Far Vehicles to RSUs,» IEEE Wireless Communications and Networking Conference (WCNC), New Orleans, L.A., U.S.A, March 2015.
- M. Khabbaz, C. Assi and W. Fawaz, «DSA-based V2I Communication Under The Microscope,» IEEE Wireless Communications and Networking Conference (WCNC), Istanbul, Turkey, April 2014.
- M. Khabbaz, H. Alazemi and C. Assi, «Stochastic Data Delivery Delay Analysis In Intermittently Connected Vehicular Networks,» IEEE Global Communications Conference (GLOBECOM), California, U.S.A, March 2012.
- M. Khabbaz, W. Fawaz and C. Assi, «Modelling and Analysis of Bulk Bundle Release Schemes in Two-Hop Vehicular DTNs,» IEEE Global Communications Conference (GLOBECOM), Houston, Texas, U.S.A, December 2011.
- M. Khabbaz, W. Fawaz and C. Assi, «A Probabilistic Bundle Relay Strategy in Two-Hop Vehicular Delay Tolerant Networks,» IEEE International Conference on Communications (ICC), Kyoto, Japan, June 2011.
- W. Fawaz, A. Sinno, R. Bardan and M. Khabbaz, «A Novel Event-driven QoS-aware Connection Setup Scheme for Optical Networks», International Conference on Digital Information and Communication Technology and Its Applications (DICTAP), Dijon, France, June 2011.
- W. Fawaz and M. Khabbaz, «Priority-aware Optical Shared Protection Coupled with Mutation Probability,» 19th Annual IEEE Wireless and Optical Communications Conference (WOCC), Shanghai, China, May 2010.

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