

Abdallah Moubayed

CONTACT INFORMATION

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RESEARCH INTERESTS

Wireless Communication, Cross-Layer Design, Resource Allocation, Cognitive Radio Networks, Machine Learning, Data Analytics, e-Learning, Cybersecurity

EDUCATION

University of Western Ontario (UWO), London, ON, Canada

Doctor of Philosophy (Ph.D), Electrical & Computer Engineering, (GPA: 94.6),
Expected: Aug. 2018

- Thesis Topic: *Optimization Modeling and Machine Learning Techniques Towards Smarter Systems and Processes*
- Advisors: Abdallah Shami, Ph.D and Hanan Lutfiyya, Ph.D
- Research Group: Optimized Communication and Computations (OC2) Lab

King Abdullah University of Science and Technology (KAUST), Thuwal, Makkah Province, Kingdom of Saudi Arabia

Master of Science (MSc.), Electrical Engineering, (High Distinction, GPA: 3.88/4),
May 2014

- Topic: *Collaborative Multi-Layer Network Coding For Hybrid Cellular Cognitive Radio Networks*
- Advisors: Mohamed-Slim Alouini, Ph.D and Tareq Al-Naffouri, Ph.D
- Research Group: Communication Theory Lab (CTL)

Lebanese American University (LAU), Byblos, Lebanon

Bachelor of Engineering (B.E.), Electrical Engineering, (High Distinction,
GPA: 3.89/4), Jun. 2012

- Final Year Project: *Car speed measurements using passive RFID tags*
- Advisor: Chadi Abou Rjeily, Ph.D

RESEARCH EXPERIENCE

Research Assistant

Sep. 2014 – present

Electrical & Computer Engineering Dep.,
University of Western Ontario
Supervisors: Abdallah Shami, Ph.D and Hanan Lutfiyya, Ph.D

Research Assistant

Sep. 2012 – Jun. 2014

Computer, Electrical and Mathematical Science and Engineering Div.,
King Abdullah University of Science and Technology
Supervisors: Mohamed-Slim Alouini, Ph.D and Tareq Al-Naffouri, Ph.D

TEACHING EXPERIENCE

Teaching Assistant

Winter 2018

ECE 9309 - Machine Learning
Instructor: Abdallah Shami, Ph.D
Electrical & Computer Eng. Dep.,
University of Western Ontario

Teaching Assistant

Winter 2017

ECE 3370 - Communication Electronics I
Instructor: Sirguei Primak, Ph.D
Electrical & Computer Eng. Dep.,
University of Western Ontario

Teaching Assistant

Winter 2016

ECE 2241 - Electrical Laboratory II
Instructor: Lyudmil Marinov, PEng
Electrical & Computer Eng. Dep.,
University of Western Ontario

Teaching Assistant

Fall 2015, 2016, & 2017

ECE 2240 - Electrical Laboratory I
Instructor: Lyudmil Marinov, PEng
Electrical & Computer Eng. Dep.,
University of Western Ontario

Teaching Assistant

Winter 2015

ECE 2208 - Electrical Measurement and Instrumentation
Instructor: Lyndon Brown, Ph.D
Electrical & Computer Eng. Dep.,
University of Western Ontario

Teaching Assistant

Fall 2014

ECE 3374 - Introduction to Electronics for Mechanical Engineering
Instructor: Vahid Sotoudehnejad, Ph.D
Electrical & Computer Eng. Dep.,
University of Western Ontario

REFEREED
CONFERENCE
PUBLICATIONS

1. K. Alhazmi, **A. Moubayed**, and A. Shami, "Green Distributed Cloud Services Provisioning in SDN-enabled Cloud Environment".
Accepted in *14th IEEE International Wireless Communications and Mobile Computing Conference (IWCMC'18)*, Limassol, Cyprus 2018.
2. **A. Moubayed**, M. Injadat, A. Shami, and H. Lutfiyya, "Relationship between Student Engagement and Performance in e-Learning Environment Using Association Rules",
IEEE World Engineering Education Conference (EDUNINE'18), Buenos Aires, Argentina, 2018.
3. K. Hammad, **A. Moubayed**, S. Primak, and A. Shami, "Investigating the Energy-Efficiency/Delay Jitter Trade-off for VoLTE in LTE Downlink",
IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'17), Montreal, QC, Canada, 2017.
4. **A. Moubayed**, A. Shami, and H. Lutfiyya, "Power-Aware Wireless Virtualized Resource Allocation with D2D Communication Underlying LTE Network",
2016 IEEE Global Communications Conference (GLOBECOM'16), Washington, DC, USA, 2016.
5. M. Hussein, **A. Moubayed**, S. Primak, and A. Shami, "Virtualized allocation performance analysis in 5G two-tier cellular networks",
2016 IEEE Canadian Conference on Electrical and Computer Engineering (CCECE'16), Vancouver, BC, Canada, 2016.
6. E. Aqeeli, **A. Moubayed**, and A. Shami, "Towards Intelligent LTE Mobility Management through MME Pooling",
2015 IEEE Global Communications Conference (GLOBECOM'15), San Diego, CA, USA, 2015.
7. M. Hussein, **A. Moubayed**, S. Primak, and A. Shami, "On efficient power allocation modeling in virtualized uplink 3GPP-LTE systems",
2015 IEEE 11th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob'15), Abu Dhabi, UAE, 2015.

REFEREED
JOURNAL
PUBLICATIONS

1. E. Aqeeli, **A. Moubayed**, and A. Shami, "Power-Aware Optimized RRH to BBU Allocation in C-RAN", in *IEEE Transactions on Wireless Communications*, 2017.
2. E. Aqeeli, **A. Moubayed**, and A. Shami, "Dynamic SON-enabled Mobility Management in LTE Networks", in *IEEE Transactions on Mobile Computing*, 2017.

3. K. Hammad, **A. Moubayed**, A. Shami, and S. Primak, "QoS-Aware Energy and Jitter-Efficient Downlink Predictive Scheduler for Heterogeneous Traffic LTE Networks", in *IEEE Transactions on Mobile Computing*, 2017.
4. K. Hammad, **A. Moubayed**, A. Shami, and S. Primak, "Analytical Approximation of Packet Delay Jitter in Simple Queues," in *IEEE Wireless Communications Letters*, vol. 5, no. 6, pp. 564-567, 2016.
5. M. Kalil, **A. Moubayed**, A. Shami, and A. Al-Dweik, "Efficient Low-Complexity Scheduler for Wireless Resource Virtualization," in *IEEE Wireless Communications Letters*, vol. 5, no. 1, pp. 56-59, 2016.
6. **A. Moubayed**, A. Shami, and H. Lutfiyya, "Wireless Resource Virtualization With Device-to-Device Communication Underlying LTE Network," in *IEEE Transactions on Broadcasting*, vol. 61, no. 4, pp. 734-740, 2015.

SUBMITTED
PUBLICATIONS

1. **A. Moubayed**, M. Injadat, A. Shami, H. Lutfiyya, "DNS Typo-squatting Domain Detection: A Data Analytics & Machine Learning Based Approach", 2018.
Submitted to *2018 IEEE Global Communications Conference (GLOBECOM'18)*.
2. **A. Moubayed**, A. Shami, and H. Lutfiyya, "Student Engagement Level in e-Learning Environment-Clustering Using K-means", 2018.
Submitted to *IEEE Access*.
3. **A. Moubayed**, M. Injadat, A. Shami, H. Lutfiyya, A. Bou Nassif, "e-Learning: Challenges & Research Opportunities Using Machine Learning & Data Analytics", 2018.
Submitted to *IEEE Access*.
4. **A. Moubayed**, K. Hammad, A. Shami, and H. Lutfiyya, "Dynamic Spectrum Management Through Resource Virtualization with M2M Communications", 2018.
Submitted to *IEEE Communications Magazine*.

AWARDS &
HONORS

University of Western Ontario

- Graduate Student Teaching Assistant (GSTA) Award May 2017
- Ontario Graduate Scholarship May 2017
- Graduate Student Award for Excellence in Research May 2016
- Outstanding Presentation in NSERC CREATE Symposium Jun. 2015
- Western Graduate Research Scholarship Sep. 2014

King Abdullah University of Science and Technology

- Fellowship Award Aug. 2012

Lebanese American University

- Distinction List Sep. 2007 – Jun. 2012

PRESENTATIONS

University of Western Ontario

- ECE Department Graduate Research Symposium May 2017
- NSERC CREATE Symposium in Comm. Sec., Privacy & Cyberethics Aug. 2016
- ECE Department Graduate Research Symposium May 2015

Conferences

- IEEE World Engineering Education Conference Mar. 208
- 59th IEEE Global Communications Conference Dec. 2016

REFERENCES

Abdallah Shami

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 Electrical & Computer Engineering Dep. E-mail: ashami@eng.uwo.ca
 University of Western Ontario

Hanan Lutfiyya

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 Computer Science Dep. E-mail: hlutfiyy@uwo.ca
 University of Western Ontario

Lydumil Marinov
Electrical Lab Manager
Electrical & Computer Engineering Dep.
University of Western Ontario

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