

EDUCATION

- **American University of Beirut** Beirut, Lebanon
Ph.D. of Engineering in Electrical and Computer Engineering; GPA: 4.00 *Sept. 2012 – May. 2015*
 - **Major Area:** Applied Electromagnetics and Radio Frequency Systems
 - **Minor Area:** Communications Engineering
- **American University of Beirut** Beirut, Lebanon
Master of Engineering in Electrical and Computer Engineering; GPA: 4.00 *Sept. 2010 – Aug. 2012*
 - **Major Area:** Applied Electromagnetics and Radio Frequency Systems
 - **Minor Area:** Communications Engineering
- **Beirut Arab University** Debbieh, Lebanon
Bachelor of Engineering in Communications and Electronics Engineering; 89.32/100 *Sept. 2005 – June 2010*
- **Makassed - Collège Khadija El-Kobra** Beirut, Lebanon
Life Sciences *Sept. 2002 – July 2005*
 - **Lebanese Baccalaureate:** Overall grade: 16.5/20 (462/560)
Distinction: Very good

EXPERIENCE

- **Beirut Arab University** Debbieh, Lebanon
Assistant Professor – ECE Department (Full Time) *Sept. 2015 – Present*
 - **Courses prepared/introduced, and taught:**
 - Radio Frequency Circuits and Systems :
 - Undergraduate Level: Propagation and Antennas II, Advanced Antenna Design
 - Graduate Level: Wave Propagation Transmission and Advanced Antenna Engineering, Microwave Engineering II
 - Signal Processing and Communications:
 - Undergraduate Level: Signals and Systems, Digital Signal Processing, Information Theory and Coding
 - Other Courses: Acoustics, Electric Circuits, Linear Algebra
 - **Activities:**
 - ABET Editor for the Communications and Electronics Engineering Program (Sept. 2017 – Present)
 - Graduate studies coordinator for the Faculty of Engineering (Sept. 2017 – Present)
 - Representative speaker of the Faculty of Engineering in the BAU Open House for the graduate studies in the academic years 2017 – 2018, and 2018 – 2019
 - Member of the Faculty Council in the academic years 2016 – 2017 and 2018 – Present
 - Member of the financial aid committee (Sept. 2016 – Present)
 - Member of the course offering committee (Sept. 2016 – Sept. 2017)
 - Member of the job fair committee (Sept. 2016 – Sept. 2017)
 - Member of the judging committee of BAU Engineering Projects Day for the academic year 2016 – 2017
 - Participated in Urban Health and Wellbeing: Advancing Systems, Science and Technology Workshop, Apr. 26 – 27, 2017
 - Representative of the Faculty of Engineering in ERASMUS+ workshop (Oct. 2017)
 - Participated in advisory committee meetings to earn FIBAA institutional accreditation at Beirut Arab University (2014)
 - Participated in advisory committee meetings to earn ABET accreditation for the Communications and Electronics Engineering program at Beirut Arab University (2014)
 - **Projects' Advising:** Two PhD students, three master students, in addition to yearly final year projects

- **American University of Beirut** Beirut, Lebanon
Research Associate, Lecturer, Co-Instructor, Research Assistant – ECE Department *Sept. 2010 – Sept. 2016*
 - **Research Associate:** Full Time, June 2015 – Sept. 2016
 - **Lecturer:** Part Time, Sept. 2014 – May 2015
Courses taught: Analog Signal Processing (2 semesters)
 - **Co-instructor:** Part Time, Sept. 2010 – Aug 2012
Courses taught: Communications Laboratory (4 semesters),
Data Structures and Algorithms (1 semester)
 - **Research Assistant:** Part Time, Sept. 2010 – May 2015

NON-ACADEMIC EXPERIENCE

- **Beirut Research and Innovation Center** Beirut, Lebanon
Researcher: Humanitarian Demining Research Program (Full Time) *Sept. 2012 – Aug. 2014*
- **Issa Holding** Debbieh, Lebanon
Business Development Consultant (Full Time) *Apr. 2016 – Aug. 2016*
- **Dar Al-Handasah Consultants (Shair and Partners)** Beirut, Lebanon
Telecommunications Engineer (Full Time) *Aug. 2011 – Sept. 2012*

HONORS AND AWARD

- **National Council for Scientific Research (CNRS) doctoral scholarship award** Beirut, Lebanon
American University of Beirut *Sept. 2013 – May 2015*
- **Lebanese Association for Scientific Research (LAsER) scholarship** Tripoli, Lebanon
American University of Beirut *Sept. 2013 – May 2015*
- **Rafic Hariri Foundation Scholarship** Beirut, Lebanon
Beirut Arab University *Sept. 2005 – June 2010*
- **The Association of Specialization and Scientific Guidance (SSG) Scholarship** Beirut, Lebanon
Beirut Arab University *Feb. 2006 – June 2010*

MEMBERSHIP AND ACTIVITIES IN PROFESSIONAL ORGANIZATIONS

- **Organizer of the ACME 2019 special session (HPCS 2019 conference) :** *Dublin, Ireland, July 2019*
- **Founder of the Radio Frequency & Antenna Design (RFAD) research group at Beirut Arab University:**
Since September 2018
- **Organizer of the ACME 2018 special session (HPCS 2018 conference) :** *Orléans, France, July 2018*
- **Member of the international program committee of the ACME 2017 special session (HPCS 2017):** *Genoa, Italy, July 2017*
- **Organizer of the 3rd Middle East Conference on Antennas & Propagation (MECAP):** *Beirut, Lebanon, Sept. 2016*
- **Scientific judge at the 18th Annual Science, Math, and Technology fair:** *American University of Beirut (April 2012)*
- **Secretary of the IEEE AP/MTT/MAG Lebanon Chapter:** *Jan. 2015 – Jan. 2016*
- **Member of the Institute of Electrical and Electronic Engineers (IEEE):** *since 2006*
- **Member of the Lebanese Order of Engineers:** *since 2011*

CERTIFICATIONS

- **GSM Network Training Certificate, Ogero Telecom:** *Beirut, Lebanon, May 2010*
- **Common Channel Signaling (SS#7) Network Training Certificate, Ogero Telecom:** *Beirut, Lebanon, Sept. 2009*
- **Digital Microwave and GSM Network Training Certificate, Ogero Telecom:** *Beirut, Lebanon, Sept. 2009*
- **Cisco Certified Network Associate (CCNA) Certificate, Cisco Networking Academy:** *Beirut, Lebanon, Oct. 2009*
- **Digital Satellite Communication Training Certificate, Beirut Media Center:** *Beirut, Lebanon, Sept. 2008*
- **AVR Microcontroller Training Certificate, Beirut Arab University:** *Beirut, Lebanon, Jan. 2008*
- **Private courses on:** Media Training, Public Speaking, History of Lebanon, Palestine, the Concept of State, Political Parties, United Nations, Contemporary Arab Thought, and Interfaith Dialogue, *2012 – 2013*

SKILLS

- **Simulation tools:** *Ansoft HFSS, CST MWS, ADS, OrCAD- PSpice, Multisim, LabVIEW, Matlab/Simulink*
- **RF planning software:** *TEMS Cell Planner Tool, Atoll simulation tool*
- **Other software/languages:** *AutoCAD, LaTeX*
- **Languages:** *Fluent in English, native Arabic speaker, with basic knowledge of French*

PUBLICATIONS

• Journals Proceedings

1. **H. M. El Misilmani**, Tarek Naous, and Salwa K. Al Khatib, "Design and Analysis of Various Antennas using Machine Learning: An Investigation of Algorithms and Techniques," Manuscript submitted for publication
2. **H. M. El Misilmani** and Tarek Naous, "Design and Challenges of Antennas for Breast Cancer Applications: Microwave Imaging and Implantable Devices," Manuscript submitted for publication
3. **H. M. El Misilmani**, M. Al-Husseini, and K. Y. Kabalan, "Two-Dimensional Slotted Waveguide Antenna Arrays with Controllable Sidelobe Level Ratio for High Power Microwave Applications," Manuscript submitted for publication
4. Khalid Youssef, Maria Moussa, Mohammed Al-Husseini, **Hilal M. El Misilmani**, and Karim Y. Kabalan, "Characteristic Mode Solution of Complex-Coefficient Complex-Solution Differential Equations," Manuscript submitted for publication
5. **H. M. El Misilmani**, M. Y. Abou-Shahine, Y. Nasser, and K. Y. Kabalan, "Recent Advances on Radio-Frequency Design in Cognitive Radio," *International Journal of Antennas and Propagation*, vol. 2016, Article ID 9878475, 16 pages, 2016. doi:10.1155/2016/9878475
6. **H. M. El Misilmani**, K. Y. Kabalan, M. Abou Shahine, and M. Al-Husseini, "A Method of Moment Approach in Solving Boundary Value Problems," *Journal of Electromagnetic Analysis and Applications*, vol. 7, Issue 3, March 2015
7. **H. M. El Misilmani**, M. Al-Husseini, and K. Y. Kabalan, "Design of Slotted Waveguide Antennas with Low Sidelobes for High Power Microwave Applications," *Progress in Electromagnetics Research C*, vol. 56, 15-28, 2015
8. **H. M. El Misilmani**, M. Al-Husseini, and K. Y. Kabalan, "Improved Vlasov Antenna with Curved Cuts and Optimized Reflector Position and Shape," *International Journal of Antennas and Propagations*, vol. 2015, Article ID 193630, 12 pages, 2015
9. **H. M. El Misilmani**, M. Abou Shahine, M. Al-Husseini, and K. Y. Kabalan, "A Simplified Method of Moment (MoM) Approach to solving nth Order Linear Differential Equations," *Int. Journal of Scientific & Engineering Research*, Vol. 5, Issue 6, June 2014
10. **H. M. El Misilmani**, M. Al-Husseini, K. Y. Kabalan and A. El-Hajj, "Compact Circularly Polarized Multi-Band Antennas for RFID Applications," *International Journal of Antennas and Propagations*, April 2014

• Conferences Proceedings

1. **H. M. El Misilmani** and M. Al-Husseini, "1D Slotted Waveguide Antenna with Controlled Beamwidth and Sidelobe Level Ratio," in the 2019 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting, Atlanta, Georgia, U.S.A., 7 – 12 July, 2019
2. **H. M. El Misilmani**, and T. Naous, "Machine Learning in Antenna Design: An Overview on Machine Learning Concept and Algorithms," in the 2019 International Conference on High Performance Computing & Simulation (HPCS 2019), Dublin, Ireland, July 15 – 19, 2019

3. **H. M. El Misilmani**, M. Al-Husseini, and K. Y. Kabalan, "Design Procedure of Two Dimensional Circularly Polarized Slotted Waveguide Antenna Arrays," in the 2018 International Conference on High Performance Computing & Simulation (HPCS 2018), Orléans, France, July 16 – 20, 2018
4. A. Damaj, **H. M. El Misilmani**, and S. Abou Chahine, "Implantable Antennas for Biomedical Applications: An Overview on Alternative Antenna Design Methods and Challenges," in the 2018 International Conference on High Performance Computing & Simulation (HPCS 2018), Orléans, France, July 16 – 20, 2018
5. **H. M. El Misilmani** and A. M. El-Hajj, "Massive MIMO Design for 5G Networks: An Overview on Alternative Antenna Configurations and Channel Model Challenges," in the 2017 International Conference on High Performance Computing & Simulation (HPCS 2017), Genoa, Italy, July 17 – July 21, 2017
6. **H. M. El Misilmani**, M. Al-Husseini, and K. Y. Kabalan, "Simple Design Procedure for 2D SWAs with Specified Sidelobe Levels and Inclined Coupling Slots," in the 4th Advanced Electromagnetic Symposium (AES 2016), Spain, July 2016
7. M. Al-Husseini, **H. M. El Misilmani**, K. Y. Kabalan, A. El-Hajj, and E. Nassar, "Simple Design Method for Dielectric-Filled Low-Sidelobe Slotted Waveguide Antennas," in the 4th Advanced Electromagnetic Symposium (AES 2016), Spain, July 2016
8. **H. M. El Misilmani**, M. Al-Husseini, and K. Y. Kabalan, "Design Procedure for 2D Slotted Waveguide Antenna with Controllable Sidelobe Level," in the 2019 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting, Canada, July 2015
9. M. Al-Husseini, **H. M. El Misilmani**, K. Y. Kabalan, A. El-Hajj, X. Pan, C. Christodoulou, "Controllable-Sidelobe Slotted Waveguide Antennas with Corrugations for Frequency Selectivity," in the IEEE International Symposium on Antennas and Propagation (APS), Canada, July 2015
10. **H. M. El Misilmani**, M. Al-Husseini, and K. Y. Kabalan, "Design Procedure for 2D Slotted Waveguide Antenna with Inclined Coupling Slots for Sidelobe Level Control," in the Progress in Electromagnetics Research Symposium (PIERS), Prague, July 2015
11. **H. M. El Misilmani**, K. Y. Kabalan M. Abou Shahine, and M. Al-Husseini, "A Method of Moment Approach in Solving Boundary Value Problems," in the First Irbid International Engineering Conference (IIEC), Jordan, October 2014
12. **H. M. El Misilmani**, M. Al-Husseini, K. Y. Kabalan and A. El-Hajj, "A Design Procedures for Slotted Waveguide Antennas with Specified Sidelobe Levels," in the High Performance Computing & Simulation Conference (HPCS), Italy, July 2014
13. **H. M. El Misilmani**, M. Al-Husseini, K. Y. Kabalan and A. El-Hajj, "Improved Antennas for High Power Microwave Applications," in the Lebanese Association for the Advancement of Science (LAAS), Lebanon, March 2014
14. **H. M. El Misilmani**, M. Al-Husseini, K. Y. Kabalan and A. El-Hajj, "Optimized Reflector Position for Vlasov Antennas," in the Progress in Electromagnetics Research Symposium (PIERS), Stockholm, Sweden, August 2013
15. **H. M. El Misilmani**, M. Al-Husseini, K. Y. Kabalan and A. El-Hajj, "Improved Vlasov Antenna with Curved Cuts for High Power Microwaves," in the High Performance Computing & Simulation Conference (HPCS), Helsinki, Finland, July 2013
16. **H. M. El Misilmani**, M. Al-Husseini, K. Y. Kabalan and A. El-Hajj, "A Simple Miniaturized Triple-band Antenna for WLAN/WiMAX Applications," in Progress In Electromagnetics Research Symposium (PIERS), Moscow, Russia, August 2012