CURRICULUM VITAE

PERSONAL INFORMATION

Name	**SAUD ALTHUNIBAT**
Address	**ALKARAK, JORDAN**
Telephone	**----------**
E-mail	**Saud.althunibat@ahu.edu.jo or salthunibat@yahoo.com**
Nationality	Jordanian

WORK EXPERIENCE

• Dates (from – to)	06 September 2017-Now
• Name and address of employer	Al-Hussein Bin Talal University, Ma'an, Jordan
• Occupation or position held	Department Head
• Main activities and responsibilities	Department of Communications Engineering
• Dates (from – to)	06 September 2015-Now
• Name and address of employer	Al-Hussein Bin Talal University, Ma'an, Jordan
• Occupation or position held	Assistant Professor
• Main activities and responsibilities	Department of Communications Engineering
• Dates (from – to)	22 OCTOBER 2014 - 24 MAY 2015
• Name and address of employer	University of Trento, Trento, Italy
• Occupation or position held	Postdoctoral Researcher
• Main activities and responsibilities	Cognitive Radio Networks
• Dates (from – to)	01 OCTOBER 2012 - 29 JANUARY 2013
• Name and address of employer	National Center for Scientific Research "DEMOKRITOS", Athens, Greece
• Occupation or position held	Visiting Researcher
• Main activities and responsibilities	Handover within Heterogeneous Networks
• Dates (from – to)	30 JUNE 2011 - 29 JUNE 2014
• Name and address of employer	University of Trento, Trento, Italy
• Occupation or position held	Teaching and Researcher Assistant
• Main activities and responsibilities	Involved in GREENET project (Initial Training Network Marie Curie Project) http://www.fp7-greenet.eu/
• Dates (from – to)	MARCH 2005 - JUNE 2011
• Name and address of employer	Mutah University, Karak, Jordan
• Occupation or position held	Lab Instructor
• Main activities and responsibilities	Electrical Circuits, Electronics, Analog and digital communications and Logic Design.

EDUCATION

• Dates (from – to)	November 2011 - November 2014
• Name of organization	University of Trento, Trento, Italy
• Principal subjects	Telecommunications Engineering
• Title of qualification awarded	PhD
• Dates (from – to)	August 2008 - August 2010
• Name of organization	University of Jordan, Amman, Jordan
• Principal subjects	Master in Electrical Engineering\ Communications

• Title of qualification awarded	Master
• Dates (from – to)	September 2000 - September 2004
• Name of organization	Mutah University, Karak, Jordan
• Principal subjects	Bachelor in Electrical Engineering\ Communications
• Title of qualification awarded	Bachelor

MOTHER TONGUE

ARABIC

OTHER LANGUAGES

ENGLISH

• Reading skills	Excellent
• Writing skills	Excellent
• Verbal skills	Excellent

ITALIAN

• READING SKILLS	GOOD
• WRITING SKILLS	BASIC
• VERBAL SKILLS	GOOD

ORGANIZATIONAL SKILLS AND COMPETENCES

- Serve as a general co-chair at the International Conference on Broadband Communications, Networks, and Systems (BROADNET). 2018 (Faro-Portugal)
- Serve as a track chair at the International Conference on Wireless Communication Systems and Networks 2018 (Amman-Jordan).
- Served as a session chair at the IEEE International Workshop in Computer Aided Modeling Analysis and Design of Communications Links and Networks (CAMAD) 2013 (Berlin-Germany).
- Served as a session chair at the IEEE Vehicular Technology Conference 2014-Spring (Seoul-South Korea).

Served as Technical Program Committee (TPC) member in the following conferences:

- IEEE Global Communications Conference 2012 & 2013.
- IEEE International Communications Conference 2013 & 2014 & 2015.
- IEEE Vehicular Technology Conference 2014 Fall.
- IEEE International Workshop in Computer Aided Modeling and Design of Communications Links and Networks (CAMAD) 2012 & 2013 & 2015.
- IEEE International Conference in e-Health Networking, Applications and Services (Healthcom) 2013 & 2014.
- IEEE Mediterranean Electrotechnical Conference (MELECON) 2014.
- International Conference in Connected Vehicles and Expo (ICCVE) 2012 & 2013.
- International Conference in Communications and Information Technology (ICCIT) 2013.

He is a reviewer in the following international journals:

- IEEE Communications Magazine.
- IEEE Communications Surveys and Tutorials.
- IEEE Transactions on Communications.
- IEEE Transactions on Wireless Communications.
- IEEE Transactions on Vehicular Technology (TVT).
- IEEE Communications Letters.
- IEEE Wireless Communications Letters.
- IEEE Signal Processing Letters.
- Journal of AD-Hoc Networks.
- International Journal of Communication Systems (IJCS).
- Journal of Mobile Networks and Applications (MONET).

AWARDS

- **BEST-PAPER AWARD / IEEE CAMAD 2012.**
- **IEEE Communication Letters: Reviewer Appreciation Program 2013: Exemplary Reviewers**

RESEARCH INTERESTS

- Space Modulation and Index Modulation.
- Physical Layer Security.
- Spectrum Sharing.
- Delay-Tolerant Networks.
- Multiple Input Multiple Output Schemes.
- Resource Management in Wireless Communications.
- Cooperative Sensing in Cognitive Radio Networks
- Heterogeneous Networks
- Security Threats in Cognitive Radio Networks.
- Routing and Security issues in Wireless Sensor Networks

PUBLICATION LIST

Book-Chapters

[BC1] Althunibat, S.; Narayanan, S.; Di Renzo, M.; Granelli, F., "**Energy-Efficient Cooperative Spectrum Sensing for Cognitive Radio Networks",** a chapter in the book **"Software-Defined and Cognitive Radio Technologies for Dynamic Spectrum Access and Management,". IGI Global 2014.**

Journals:

[J1] S. Althunibat, R. Mesleh and E. Basar, "**Differential Subcarrier Index Modulation**", IEEE Transactions on Vehicular Technology, Accepted, May 2018

[J2] S. Althunibat and R. Mesleh, "**Index Modulation for Cluster-based Wireless Sensor Networks**", IEEE Transactions on Vehicular Technology, Accepted, March 2018.

[J3] S. Althunibat, V. Sucasas, and J. Rodrigues, "**A Physical-Layer Security Scheme by Phase-based Adaptive Modulation**", IEEE Transactions on Vehicular Technology, vol. 66, no. 11, pp. 9931- 9942, November 2017

[J4] S. Althunibat and R. Mesleh, **"Enhancing Spatial Modulation System Performance Through Signal Space Diversity**," IEEE Communications Letters, accepted, March 2018.

[J5] R. Mesleh, S. Althunibat and A, Younis, "**Differential Quadrature Spatial Modulation**", IEEE Transactions on Communications, vol. 65, no. 9, September 2017.

[J6] S. Althunibat, V. Sucasas, G. Mantas and J. Rodriguez, "**Physical-Layer Entity Authentication Scheme for Mobile MIMO Systems**", IET Communications, vol. 12, no. 6, pp. 712-718, April 2018.

[J7] O. Badarneh, S. Althunibat, R. Mesleh and Amer Magableh, "**A Unified Performance Analysis of Decode-and-Forward Dual-hop Relaying-Based Wireless Energy Harvesting with Space Modulation**", Transactions on Emerging Telecommunications Technologies, Accepted 2018.

[J8] V. Sucasas G. Mantas, S. Althunibat, L. Oliveira, A. Antonopoulos, I. Otung and J. Rodriguez, "**A privacy-enhanced OAuth 2.0 based protocol for Smart City mobile applications",** Computers and Security (Elsevier), vol. 74, pp. 258-274, May 2018.

[J9] S. Althunibat, and R. Mesleh, "**Performance Analysis of Quadrature Spatial Modulation in Two-Way Relaying Cooperative Networks**", IET Communications, vol. 12, no. 4, pp. 466-472, March 2018.

[J10] S. Althunibat and R. Mesleh, "**A Bit to Symbol Mapping Scheme for Spatial Modulation with Partial Channel State Information**", IEEE Communication Letters, vol. 21, no. 5, May 2017.

[J11] S. Althunibat, A. Khalifeh and R. Mesleh, "**On the Performance of Wireless Sensor Networks with QSSK Modulation with the Presence of Co-Channel Interference",** Telecommunication Systems, vol. 68, no. 1, May 2018.

[J12] S. Althunibat, A. Kalifeh, and R. Mesleh, "**A Low-Interference Decision-Gathering Scheme for Critical Event Detection in Clustered Wireless Sensor**

Networks", Physical Communications (Elsevier), vol. 26, pp. 149-155, February 2018.

[J13] S. Althunibat and R. Mesleh, "**Cooperative Decode-and-Forward Quadrature Spatial Modulation over Correlated and Imperfect \eta-\mu Fading Channels**", Wireless Networks (Springer), 2107.

[J14] S. Althunibat, A. Antonopoulos, E. Kartsakli, F. Granelli and C. Verikoukis, " **Countering Intelligent Dependent Malicious Nodes in Target Detection Wireless Sensor Networks**", IEEE Sensors, vol. 16, no. 23, pp 8627-8639, 2016.

[J15] S. Althunibat and F. Granelli, "**Identification and Punishment Policies for Spectrum Sensing Data Falsification Attackers Using Delivery-based Assessment**", IEEE Transactions on Vehicular Technology, vol. 65, no. 9, pp 7308-7321, Sep. 2016.

[J16] S. Althunibat et al., "**Auction-based Data Gathering Scheme for Wireless Sensor Networks**", IEEE Communication Letters, vol. 20, no. 6, 2016.

[J17] S. Althunibat, and F. Granelli, "**An Objection-Based Collaborative Spectrum Sensing for Cognitive Radio Networks**," IEEE Communications Letters, vol.18, no.8, pp.1291-1294, Aug. 2014.

[J18] S. Althunibat, V. Sucasas, H. Marques, J. Rodriguez, R. Tafazolli and F. Granelli, **"On the Trade-Off Between Security and Energy Efficiency in Cooperative Spectrum Sensing for Cognitive Radio,"** IEEE Communications Letters, vol.17, no.8, pp.1564-1567, August 2013.

[J19] S. Althunibat, R. Palacios and F. Granelli, "**Performance Optimisation of Soft and Hard Spectrum Sensing Schemes in Cognitive Radio**," IEEE Communications Letters, vol.16, no.7, pp.998-1001, July 2012.

[J20] V. Sucasas, S. Althunibat, A. Radwan, H. Marques, J. Rodriguez, S. Vahid and F. Granelli "**Lightweight security against combined IE and SSDF attacks in cooperative spectrum sensing for cognitive radio networks**. *Security and Communication Networks*. Vol. 8, no. 18, pp. 3978-3994, December 2015.

[J21] S. Althunibat, M. Di Renzo, and F. Granelli., "**Towards Energy-Efficient Cooperative Spectrum Sensing for Cognitive Radio Networks, An Overview**", Telecommunication Systems (Sprigner), vol. 59, no.1, pp. 77-91, 2014.

[J22] S. Althunibat, Q. Wang, and F. Granelli. "**Flexible channel selection mechanism for cognitive radio based last mile smart grid communications**." *Ad Hoc Networks* (Elsevier), vol. 41, pp. 47-56, May 2016.

[J23] S. Althunibat and F. Granelli, "**On Results' Reporting of Cooperative Spectrum Sensing in Cognitive Radio Networks**", Telecommunication Systems (Springer), vol. 62, no. 3, pp. 569-580, July 2016.

[J24] S. Althunibat, M. Di Renzo, and F. Granelli. "**Cooperative spectrum sensing for cognitive radio networks under limited time constraints**." Computer Communications, Elsevier, vol. 43, pp. 55-63, May 2014.

[J25] S. Althunibat, N. Zorba, F. Granelli and C. Verikoukis, "**Energy optimization in multiuser quantized feedback systems**", EURASIP Journal on Wireless Communications and Networking (Springer), vol. 1, pp. 1-8, 2013.

[J26] S. Althunibat, N. Zorba, C. Skianis and C. Verikoukis, "**Power Management in Multiuser Adaptive Modulation Transmission under QoS Requirements** ", EURASIP International Journal of Antennas and Propagation, July 2013.

Conferences:

[C1] R. Mesleh and S. Althunibat, "**Coherent Versus Non-Coherent Subcarrier Index Modulation Systems**", IEEE WCNC 2018, Barcelona-Spain.

[C2] S. Althunibat, M. Al-Hasanat and A. Alhasanat, "**To Handover or Not To Handover (As a Secondary User): An Energy Efficiency Perspective**", IEEE CAMAD, 2017, Lund-Sweden.

[C3] G. Al-Sukkar and S. Althunibat, "**Gray Codes for Spatial Modulation Systems, An Open Research Issue**", IEEE CAMAD 2017, Lund-Sweden.

[C4] S. Althunibat, "**A Mapping Technique for Space Shift Keying with Arbitrary Number of Transmit Antennas**", IEEE CAMAD 2017, Lund-Sweden.

[C5] N. Ayyad, N. Alqaramseh, M. Qazzaz, S. Althunibat and W. A. Shehab, "**Setup optimization in spatial modulation systems: A simulation study**," *ICICS*, Irbid, Jordan, 2017, pp. 241-245**.**

[C6] Althunibat, S.; Voung T.; Granelli, F.; " **Optimizing the Number of Samples for Multi-Channel Spectrum Sensing**", IEEE ICC 2015, London-UK.

[C7] Althunibat, S.; Voung T.; Granelli, F.; "Multi**-Channel Collaborative Spectrum Sensing in Cognitive Radio Networks**", IEEE CAMAD 2014, Athens- Greece.

[C8] Masbernat, X.; Althunibat, S.; Kibalya, G.; Gruet, C.; Naviner, L.; Granelli, F.; "**Battery-Aware Network Discovery Algorithm for Mobile Terminals within Heterogeneous Networks**", IEEE CAMAD 2014, Athens-Greece.

[C9] Althunibat, S; Denise, B.; Granelli, F., "**Secure Cluster-based Cooperative Spectrum Sensing against Malicious Attackers**", in IEEE Global Communication Conference (GLOBECOM) 2014- WS-TCPLS.

[C10] Althunibat, S; Denise, B.; Granelli, F., "**A Punishment Policy for Spectrum Sensing Data Falsification Attackers in Cognitive Radio Networks**," IEEE VTC=Fall, 2014. -Vancouver, Canada.

[C11] Althunibat, S; Di Renzo M.; Granelli, F., "**Robust Algorithm Against Spectrum Sensing Data Falsification Attack in Cognitive Radio Networks**," IEEE VTC-Spring, May 2014, Seoul-Korea.

[C12] Althunibat, S; Granelli, F., "**Energy Efficiency Analysis of Soft and Hard Cooperative Spectrum Sensing Schemes in Cognitive Radio Networks**," IEEE VTC, May 2014, Seoul-Korea.

[C13] Althunibat, S.; Kontovasilis, K.; Granelli, F., "A **Handover Policy for Energy Efficient Network Connectivity through Proportionally Fair Access**," European Wireless 2014, May 2014, Barcelona-Spain.

[C14] Althunibat, S.; Di Renzo, M.; Granelli, F., "**Optimizing of the K-out-of-N rule for cooperative spectrum sensing in cognitive radio networks**," IEEE GLOBECOM, 2013, Atlanta-USA.

[C15] Althunibat, S.; Granelli, F., "**Energy-Efficient Reporting Scheme for Cooperative Spectrum Sensing**," IEEE CAMAD, 2013, Berlin-Germany.

[C16] Althunibat, S.; Granelli, F., "**Novel energy-efficient reporting scheme for spectrum sensing results in cognitive radio**," IEEE ICC, June 2013, Budapest-Hungary.

[C17] Althunibat, S.; Narayanan, S.; Di Renzo M.; Granelli, F., "**Energy-Efficient Partial-Cooperative Spectrum Sensing in Cognitive Radio over Fading Channels**," IEEE VTC-Spring 2013, Dresden-Germany.

[C18] Althunibat, S.; Granelli, F., "**On the reduction of power loss caused by imperfect spectrum sensing in OFDMA-based Cognitive Radio access**, "IEEE GlobeCom, 2012, California-USA.

[C19] Althunibat, S.; Kibalya, G.; Granelli, F., "**Energy-efficient Network Discovery mechanism by exploiting cooperation among terminals**," IEEE SCVT, 2012, Eindhoven-Netherlands.

[C20] Althunibat, S.; Narayanan, S.; Di Renzo, M.; Granelli, F., "**On the Energy Consumption of the Decision-Fusion Rules in Cognitive Radio Networks**," IEEE CAMAD, 2012, Barcelona-Spain. **BEST PAPER-AWARD**.

[C21] Althunibat, S.; Palacios, R.; Granelli, F., "**Energy-efficient spectrum sensing in Cognitive Radio Networks by coordinated reduction of the sensing users**," IEEE ICC, 2012, Ottawa-Canada.

[C22] Althunibat, S.; Zorba, N.; Skianis, C.; Verikoukis, C., "**Power saving in multiuser adaptive modulation transmission**," IEEE CAMAD, 2010, Miami-USA.

[C23] Althunibat, S.; Zorba, N.; Loeb, H.P.; and Verikoukis, C, "**Power Saving in Multiuser Adaptive Modulation Transmission with Quantized Feedback**," In Mobile Multimedia Communications Springer Berlin Heidelberg, 2012, Lisbon-Portugal.