

CURRICULUM VITAE

Full name

Saleh Al-Jazzar

Electrical Engineering,

Al-Zaytoonah University, Amman, Jordan

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Photo



1. Personal Data

Date of Birth: 16/7/1975

Nationality: Jordanian

2. Education

- Ph.D. (Wireless Communications) 2004, University of Cincinnati, Cincinnati, Ohio, USA
- M.Sc. (Radio Communications) 1998, University of Leeds, Leeds, UK
- B.Sc. (Electrical Engineering) 1997, University of Jordan, Amman, Jordan

3. Ph.D. Dissertation

Algorithms and Parameter Estimation for Radiolocation in NLOS Environments,
University of Cincinnati, Ohio, Cincinnati, USA.



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4. Employment

Academic Positions

- Associate Professor, Electrical Engineering, Al-Zaytoonah University, Amman, Jordan
November 27, 2017 – now
- Assistant Professor, Electrical Engineering, Al-Zaytoonah University, Amman, Jordan
February 16, 2014 – November 27, 2017
- Research Fellow, Electrical Engineering, KAUST, Thuwal, Saudi Arabia
September 15 2012- September 15 2013
- Assistant Professor, Electrical Engineering, University of Hail, Hail, Saudi Arabia
September 1 2011- August 31 2012
- Assistant Professor, Electrical Engineering, The Hashemite University, Zarqa, Jordan
October 9, 2006 – October 5, 2010
- Lecturer, Electrical Engineering, The Hashemite University, Zarqa, Jordan
September 19, 2004 – October 9, 2006

5. Research Interests

Channel Estimation and Tracking.
Positioning.
Adaptive Signal Processing Applications to Communication Systems.
Blind Signal Detection.
Space-Time Signal Processing.
Smart Antennas.
Angle-of-Arrival Estimation.
Multiple Access (OFDMA, SC-OFDMA, CDMA) Systems.
Relay Self Interference Mitigation.
MIMO systems.
Machine Learning.

6. Membership in Scientific Societies and Associations

Jordanian Engineering Association



7. Honors and Awards

Best paper award, The 10th Jordan International Electrical and Electronics Engineering Conference (JIEEEEC 2017), Amman, Jordan, May 2017.

Best paper award, The Fourth International Conference on Future Generation Communication Technologies (FGCT 2015), Luton, UK, July 2015.

British Arab Chamber Award (1998).

The M.Sc. degree was awarded with distinction, School of EE Engineering, University of Leeds, Leeds, United Kingdom (1997-1998).

8. Fellowships and Scholarships

University Graduate Scholarship, ECECS Department, University of Cincinnati, Cincinnati, Ohio, USA (1999-2004).

University Scholarship, ECE Department, Hashemite University, Zarqa, Jordan (1999-2002).

Research Assistantship, ECECS Department, University of Cincinnati, Cincinnati, Ohio, USA (2001-2002).

Teaching Assistantship, ECECS Department, University of Cincinnati, Cincinnati, Ohio, USA (2000).

9. Teaching Experience

- *Undergraduate Courses*

Wireless Communications.
 Communication Systems.
 Microwave Circuits.
 Analogue & Digital Communications.
 Radio Propagation and Antennas.
 Probability and Random Processes.
 Engineering Mathematics.
 Digital Logic.
 Electrical Circuits I & II.
 Numerical Methods.
 Engineering Economy.
 Technical Writing.
 Introduction to Electrical and Electronics Circuits.
 Communications Lab.
 Communications Electronics Lab.
 Electrical Circuits I & II Lab.
 Electronics I Lab.
 Digital Logic Lab.



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10. Grants

Channel Estimation in OFDM Wireless Communication and Beamforming in Radar Arrays, 2014-2016, Al-Zaytoonah University of Jordan.

11. Patents

Al-Jazzar, Saleh. "A tri-phase code generator in a CDMA wireless communication system." PCT/CA2010/001474. September 2010.

Al-Jazzar, Saleh. "Method for correcting NLOS error in wireless positioning system." US 7,065,368 B2. June 20, 2006.

Al-Jazzar, Saleh. "Method for calibrating NLOS error for positioning system." Korea Patent 1020010082955. June 27, 2003.

12. Membership of Committees

- National and International
 - *JEA Association*
- University
 - *ABET Committee*
 - *QA Committee*
 - *Syllabus Committee*

13. Participation in or organization of curricular and/or extra-curricular activities

- Reviewer for IEEE Transactions on Vehicular Technologies, IEEE Transactions on Wireless Communications, IEEE Signal Processing Letters, IEEE Communication Letters, ELSEVIER Signal Processing, IET Communications and many national and international conferences.
- Session chair for Mobile Computing and Wireless Communication International Conference 2006.
- TPC member for Mosharaka International Conference on Wireless Communications and Mobile Computing 2012.
- ABET coordinator for the EE department at the Hashemite University.



14. Publications

Journals

- [J1] S. Al-Jazzar, M. Ghogho, and D. C. McLernon, "A TOA/AOA constraint minimization method for wireless positioning in Non-Line-Of-Sight environment," *IEEE Transactions on Vehicular Technologies (Publisher: IEEE)*, vol. 58, pp.468-472, January 2009.
- [J2] S. Al-Jazzar, J. Caffery, Jr., and H.-R. You, "Scattering model-based solutions to TOA location in NLOS environments," *IEEE Transactions on Vehicular Technologies (Publisher: IEEE)*, vol. 56, p.p. 583-593, March 2007.
- [J3] S. Al-Jazzar, D. C. McLernon, and M. Smadi, "SVD-based joint azimuth/elevation estimation with automatic pairings," *Signal Processing (Publisher: Elsevier)*, vol. 90, issue 5, p.p.1669-1675, May 2010.
- [J4] S. Al-Jazzar, A. Muchkaev, Ahmad Al-Nimrat, and M. Smadi, "Low complexity and high accuracy angle of arrival estimation using eigenvalue decomposition with extension to 2D AOA and power estimation," *EURASIP Journal on Wireless Communications and Networking (Publisher: Springer)*, doi:10.1186/1687-1499-2011-123, October 2011.
- [J5] S. Al-Jazzar, "Enhancement of wireless positioning in outdoor suburban NLOS environment using Hybrid-Network-GPS systems," *EURASIP Journal on Wireless Communications and Networking (Publisher: Springer)*, doi:10.1186/1687-1499-2012-100, March 2012.
- [J6] S. Al-Jazzar, D. C. McLernon, J. Caffery, Jr., M. Smadi, and J. Ghaeb, "A modified unscented filter for delay tracking in asynchronous CDMA," *AEÜ - International Journal of Electronics and Communications (Publisher: Elsevier)*, vol. 65, issue 1, p.p. 9-15, January 2011.
- [J7] S. Al-Jazzar, Ahmad Al-Nimrat, and M. Smadi, "Delay estimation enhancement in CDMA systems using optimum training bits' power," *AEÜ - International Journal of Electronics and Communications (Publisher: Elsevier)*, vol. 66, issue 3, p.p. 244-248, March 2012.
- [J8] S. Al-Jazzar, "Angle of Arrival Estimation Using Cholesky Decomposition," *International Journal of Antennas and Propagation (Publisher: Hindawi)*, doi:10.1155/2012/803617, March 2012.
- [J9] S. Al-Jazzar, Z. Hamici, S. Aldalahmeh "Two-Dimensional AOA Estimation Based on a Constant Modulus Algorithm," *International Journal of Antennas and Propagation (Publisher: Hindawi)*, doi:10.1155/2017/3214021, January 2017.
- [J10] M. Smadi, M. Ababneh, and S. Al-Jazzar, "Simulation and numerical analysis of wireless PSK systems with imperfect carrier phase recovery," *International Journal of Modeling and Simulation (Publisher: Actapress)*, vol. 29, no.4, pp. 405-409, November 2009.
- [J11] M. Smadi, V. Prabhu, and S. Al-Jazzar, "Analytical Study on the Effect of Cochannel Interference on Partially Coherent Diversity Systems," *IEEE Transactions on Communications (Publisher: IEEE)*, vol. 57, issue 1, p.p. 117-124, January 2009.
- [J12] M. Smadi, S. Al-Jazzar, and J. Ghaeb, "Simplified bit error rate evaluation of Nakagami-m PSK systems with phase error recovery," *Wireless Communication and Mobile Computing (Publisher: Wiley)*, vol. 12, issue 3, p.p. 248-256, February 2012.
- [J13] M. Smadi, J. Ghaeb, and S. Al-Jazzar, "Confidence Intervals Verification for Simulated Error Rate Performance of Wireless Communication," *Wireless Personal Communications (Publisher: Springer)*, vol. 71, issue 4, p.p. 2463-2474, August 2013.
- [J14] Y. Al-Kharabsheh, M. Amin, and S. Al-Jazzar, "Closed form Delay/Doppler/Propagation Factor Acquisition for GPS Signals," *WSEAS Transactions on Signal Processing (Publisher: WSEAS)*, Accepted, 2015.



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Conferences

- [C1] **S. Al-Jazzar** and Saad Shaker "*Blind self-interface cancellation for amplify and forward relaying*," The 10th Jordan International Electrical and Electronics Engineering Conference (JIEEEEC 2017), Amman, Jordan, May 2017. (*Best paper award*)
- [C2] **S. Al-Jazzar** "*Self-interference minimization for Decode and Forward relays using tri-level coding*," The Third International Conference on Environmental and Innovation, Amman, Jordan, May 2016.
- [C3] **S. Al-Jazzar** and S. Aldalameh "*Relay self-interference minimisation for QAM*," The Fourth International Conference on Future Generation Communication Technologies (FGCT 2015), Luton, UK, July 2015. (*Best paper award*)
- [C4] **S. Al-Jazzar**, Hal J. Strangeways and Desmond C. McLernon "*2-D Angle of Arrival Estimation Using a One-Dimensional Antenna Array*," The European Signal Processing Conference (EUSIPCO 2014), Lisbon, Portugal, September 2014.
- [C5] **S. Al-Jazzar**, Tareq Al-Naffouri "*Relay self interference minimisation using tapped filter*," The 8th International Workshop on Systems, Signal Processing and their applications (WOSSPA 2013), Algiers, Algeria, May 2013.
- [C6] **S. Al-Jazzar**, "*Angle of arrival estimation using Eigenvalue decomposition for higher resolution at small angular separation*," IET International Communication Conference on Wireless Mobile & Computing (CCWMC2009), Shanghai, China, December 2009.
- [C7] **S. Al-Jazzar**, and M. Ghogho, "*A Joint TOA/AOA constrained minimization method for locating wireless devices in Non-Line-of-Sight environment*," IEEE Vehicular Technology Conference (VTC-Fall 2007), Baltimore, Maryland, September 2007.
- [C8] **S. Al-Jazzar**, and J. Caffery, Jr., "*A novel AOA/Delay estimator for wideband DS-SS systems*," 14th IST Mobile & Wireless Communications Summit, Dresden, Germany, June 2005.
- [C9] **S. Al-Jazzar**, and J. Caffery, Jr., "*A novel NLOS identification for moving MS*," 14th IST Mobile & Wireless Communications Summit, Dresden, Germany, June 2005.
- [C10] **S. Al-Jazzar**, and J. Caffery, Jr., "*NLOS mitigation for urban environments*," IEEE Vehicular Technology Conference (VTC-Fall 2004), Los Angeles, California, September 2004.
- [C11] **S. Al-Jazzar**, and J. Caffery, Jr., "*ESPRIT-based joint AOA/Delay estimation for CDMA-system*," IEEE Wireless Communications and Networking Conference (WCNC 2004), Atlanta, Georgia, March 2004.
- [C12] **S. Al-Jazzar**, and J. Caffery, Jr., "*ML and Bayesian TOA location estimators for NLOS environments*," IEEE Vehicular Technology Conference (VTC-Fall 2002), Vancouver, BC, Canada, September 2002, pp. 1178-1181.
- [C13] **S. Al-Jazzar**, J. Caffery, Jr., and H. R. You, "*A scattering model based approach to NLOS mitigation in TOA location systems*," IEEE Vehicular Technology Conference (VTC-Spring2002), Birmingham, Alabama, May 2002, vol. 2, pp. 861-865.