

Dr. Mohammed Alarfaj

Assistant Professor



Personal Data:

Nationality | Saudi
Date of Hire | 2019
Date Rank Obtained | March 2019
Department | Electrical Engineering
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Office No | 2102
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Education:

Academic Degree	Major	specialty	Place of Issue	Address	Date
Doctorate (PhD)	Electrical Engineering	Wireless Communications	Oregon State University	Corvallis, Oregon	March 2019
Masters (M.Sc.)	Electrical Engineering		Oregon State University	Corvallis, Oregon	December 2014
Bachelor (B.Sc.)	Electrical Engineering		Oregon State University	Corvallis, Oregon	December 2011

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions):

PhD	Efficient Beamforming Techniques for Millimeter Wave MIMO Systems
Master	Low Power Microcontrollers for Wireless Sensors

Experiences:

Title of Job	Address of Work	Country	Date	
Electrical Engineering Department, Chair	King Faisal University - College of Engineering	KSA	From	2019
			To	Present
Students' Academic Performance Committee, Chair	King Faisal University – Vice Presidency for Academic Affairs	KSA	From	2020
			To	Present
Industrial Relations Committee, Chair	King Faisal University - College of Engineering	KSA	From	2019
			To	2020

Research Interests:

1. Detection of human body movement
2. Human Movement Pattern and Vital Sign Detection Using Smart Sensor Network
3. Development of Smart Sensor Networks for People with Significant Medical Disability
4. The fifth-generation mobile cellular communications system (5G)

Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1.	Alarfaj M, Su Z, Liu R, Al-Humam A, Liu H.	Image-tag-based indoor localization using end-to-end learning	International Journal of Distributed Sensor Networks. November 2021.	Click Here
2.	Alarfaj M, Qian Y, and Liu H	Detection of Human Body Movement Patterns Using IMU and Barometer	International Conference on Communications, Signal Processing, and their Applications (ICCSPA), 2020	Click Here
3.	S. R Mohamed, Alarfaj M, M. H Shwehdi, A Bubshait, A Sma	Investigation of Harmonics and Transient Overvoltages Due to Capacitor Bank Switching on Distribution Network	International Journal of Engineering and Advanced Technology (IJEAT), 2020 ISSN: 2249 – 8958	Click Here
4.	Alarfaj M and Liu H	Subarray Hybrid Precoding with Finite-Resolution PSs for Massive MIMO Capacity Maximization	IET Communications, 2019	Click Here
5.	P.Aruna Jeyanthi , S Raja Mohammed, D Devaraj , J.D Darwin, Alarfaj M.	Stability Characteristics of Photovoltaic system using SVC Controllers	Springer proceedings in Energy, Aug, 2020	Click Here
6.	Alarfaj M. and H. Liu,	Generalizing Hybrid Beamforming Solutions for Massive MIMO Systems	in Proc. IEEE VTC17-Fall, Sep. 2017, Toronto, Canada.	Click Here
7.	Alarfaj M. and H. Liu,	Subarray Hybrid Precoding for Massive MIMO Capacity Maximization	in Proc. IEEE ICUWB 2017, Sep. 2017, Salamanca, Spain	Click Here

Language Proficiency:

1. Arabic
2. English