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RESEARCH INTERESTS	Signal and Image Processing, Wireless Communication, Wireless Sensor Networks	
EDUCATION	<p>M.S. in Electrical Engineering Sep. 2014 - Jan. 2017 King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia.</p> <ul style="list-style-type: none"> • CGPA: 3.821/4.00 • Thesis Topic: <i>Compressed Sensing Based Image Denoising: Novel Patch-Based Collaborative Algorithms</i> (available for download at http://www.muzammilbehzad.com) • Advisors: Prof. Tareq Y. Al-Naffouri and Prof. Wail Mousa • Courses: Stochastic Processes, Digital Signal Processing, Image Processing, Digital Communications I, Digital Communications II, Adaptive Filtering and Applications, Linear Control Systems, Independent Research. <p>B.S. in Electrical Engineering Sep. 2009 - Jun. 2013 COMSATS Institute of Information Technology, Islamabad, Pakistan.</p> <ul style="list-style-type: none"> • CGPA: 3.87/4.00, Percentage: 90.53% • Final Year Project: <i>GPS & GSM Based Vehicle Tracking System</i> (available online) • Major: Wireless Communications and Embedded Systems 	
PROFESSIONAL EXPERIENCE	<p>Research Associate Sep. 2016 - Present COMSATS Institute of Information Technology, Islamabad, Pakistan.</p> <ul style="list-style-type: none"> • Research work and teaching: Object Oriented Programming, Introduction to Computer Programming, Computer Graphics. <p>Visiting Research Scholar Different weeks, & summers of 2015 & 2016 King Abdullah University of Science and Technology, Thuwal, Saudi Arabia.</p> <ul style="list-style-type: none"> • MS thesis research work - visiting research group of Prof. Tareq Y. Al-Naffouri <p>Teaching Assistant Jan. 2015 - Jan. 2016 King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia.</p> <ul style="list-style-type: none"> • Stochastic Processes - Spring 2015 and Digital Communications I - Fall 2015. <p>Research Associate Sep. 2013 - Aug. 2014 COMSATS Institute of Information Technology, Islamabad, Pakistan.</p> <ul style="list-style-type: none"> • Research work and teaching: Object Oriented Programming, Introduction to Computer Programming, Computer Communication and Networks <p>Research and Project Intern Jun. 2012 - Jun. 2013 Centre for Advance Studies in Telecommunication, Islamabad, Pakistan.</p> <ul style="list-style-type: none"> • Worked on: Final Year Project, GPS & GSM Based Embedded Systems, PCB, Hardware and Circuit Designing, Thesis and Research Work. <p>Network Intern Jul. 2011 - Sep. 2011 National Telecom Corporation (NTC), Islamabad, Pakistan.</p> <ul style="list-style-type: none"> • Worked on: Networking Project, Routing Protocols, C/C++ Programming, Practical Implementation on Simulation Software. 	
AWARDS AND ACHIEVEMENTS	<p>Fully Funded M.S. Electrical Engineering at KFUPM Sep. 2014 - Jan. 2017</p> <p>Supervised and Won Best Final Year Project Award (Supervisor) in CIIT 2014</p> <p>Valedictorian - Honor of Convocation Graduation Speech in CIIT 2013</p> <p>Institute Silver Medal Award in B.S. Electrical Engineering 2013</p> <p>Campus Silver Medal Award in B.S. Electrical Engineering 2013</p> <p>Laptop awarded by Gov. of Pakistan for holding the top Position in B.S. 2013</p> <p>Runner Up in National Level Line Tracking Robotics Competition ROBIAN'12 2012</p> <p>Talent Award for Batch Position holder by SAFE (NGO) at CIIT 2010</p> <p>Prize Money Merit-Scholarships by CIIT During B.S. Study 2009 - 2013</p>	

TECHNICAL SKILLS	<p>Computer Programming</p> <ul style="list-style-type: none"> • C, C++, MATLAB, HTML, Assembly <p>Computer Networking (CCNA-Certification)</p> <ul style="list-style-type: none"> • IP Addressing, OSI/TCP Model, Routing, Switching, Subnetting, Supernetting, Routing Protocols, Network Programming, Socket Programming, TCP Handshaking <p>Operating Systems and Applications</p> <ul style="list-style-type: none"> • Windows, Linux, L^AT_EX(Miktex, WinEdt, TeXStudio), Proteus, Packet Tracer, CodeVisionAVR, MS Visual Studio, MS Office
MANAGEMENT AND TRAININGS EXPERIENCE	<p>Indoor Positioning and Navigation Workshop, KAUST Enrichment Program 2017</p> <p>Attended iPakistan: Innovative Forum for Computer Scientists by CIIT 2016</p> <p>Participated and Represented CIIT in 3rd Pak-China Business Forum 2014</p> <p>Represented CIIT in 11th Frontiers of Information Technology 2013</p> <p>Organized All-Pakistan Robotics Competition 'ROBIAN' Twice at CIIT 2012 & 2013</p> <p>Organized CIIT's 46th Graduation Convocation as Usher 2012</p> <p>Organized Inter & Intra-University Debate/Declamation Contests at CIIT 2012</p> <p>Attended Workshop on Robotic Designing in CIIT 2012</p>
ACADEMIC PROJECTS	<p>GPS and GSM Based Vehicle Tracking System - B.S. Final Year Project Wireless Communication, GPS & GSM, Embedded Systems, C/C++ Programming, Networking, PCB and Circuit Designing, Thesis/Research Papers, Simulations</p> <p>Client-Server Architecture on Linux OS C/C++ Programming, Linux Network Programming, Socket Programming, File Transferring, OSI/TCP Model, Local-Host Client-Server Communication</p> <p>RFID Based Remote Authentication System Embedded Systems, C/C++ Programming, Microcontroller ATmega16</p> <p>Line Tracking Autonomous Robot Embedded Systems, Assembly and C++ Programming, Microcontroller, Sensors</p> <p>Routing Protocols RIP/IGRP/EIGRP/OSPF Implementation Routing, Network Programming, IP Addressing, Subnetting, Routing Protocols</p> <p>Binary Clock and Kitchen Timer Programming, Embedded Systems, PCB Designing, Digital Logic Design</p> <p>C/C++ Programming Projects on Windows/Linux OS Client-Server Chat Server, Database Management System, Restaurant Information System, Login Authentication System, Student/Faculty Management System</p>
CERTIFICATIONS	<ul style="list-style-type: none"> • CCNA Discovery (Regional Certification in 2012 from CISCO Regional Academy) • CCNA Security (Regional Certification in 2012 from CISCO Regional Academy) • IT Essentials (Regional Certification in 2012 from CISCO Regional Academy)
STANDARDIZED TESTS	<ul style="list-style-type: none"> • GRE: Quantitative: 159, Verbal: 142, Analytical Writing: 3.0, Overall score: 301 • IELTS: Overall band: 6.5
PROFESSIONAL MEMBERSHIP	<p>Student Member, Institute for Elect. and Electronics Engineers (IEEE) since 2016</p> <ul style="list-style-type: none"> • IEEE Signal Processing Society since 2016 <p>Member, Pakistan Engineering Council (PEC) since 2013</p>
PERSONAL SKILLS	<ul style="list-style-type: none"> • Languages: English (Expert), Urdu (Expert), Pushtu (Expert), Arabic (Beginner) • Strong interpersonal, communication and presentation skills • Good technical writing and formal reporting skills • Quick learner, dedicated, highly motivated, enthusiastic, confident and team player
VOLUNTARY SERVICES	<p>Volunteer in Voluntary Work Unit on KFUPM Volunteer's Day, Saudi Arabia 2015</p> <p>Volunteer in Pakistan Hajj Volunteer Group (PHVG), Saudi Arabia 2014</p>

PUBLICATIONS

- J1 **M. Behzad**, M. S. Javaid, M. A. Paracha and S. Khan, “Distributed PCA and Consensus Based Energy Efficient Routing Protocol for WSNs”, *Journal of Information Science and Engineering* [Initially Submitted in December 2015, Revisions Submitted in April 2016, Accepted in May 2017].
- C8 **M. Behzad**, M. Masood, T. Ballal, M. Shadaydeh and T. Al-Naffouri, “Image denoising via collaborative support-agnostic recovery”, *The 42nd IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, New Orleans, USA, 2017.
- C7 **M. Behzad** and Y. Ge, “Performance Optimization in Wireless Sensor Networks: A Novel Collaborative Compressed Sensing Approach”, *The 31st IEEE International Conference on Advanced Information Networking and Applications (AINA)*, Tamkang University, Taipei, Taiwan, 2017.
- C6 **M. Behzad**, N. Javaid, A. Sana, M. T. A. Khan, N. Saeed, Z. A. Khan, U. Qasim, “TSDDR: Threshold Sensitive Density Controlled Divide and Rule Routing Protocol for Wireless Sensor Networks”, *The 9th IEEE International Conference on Broadband and Wireless Computing, Communication and Applications (BWCCA)*, Guangzhou, China, 2014.
- C5 **M. Behzad**, A. Sana, M. A. Khan, Z. Walayat, U. Qasim, Z. A. Khan, N. Javaid, “Design and Development of a Low Cost Ubiquitous Tracking System”, *The 9th International Conference on Future Networks and Communications (FNC)*, Niagara Falls, Ontario, Canada, 2014.
- C4 F. Saleem, Y. Moeen, **M. Behzad**, M. A. Hasnat, Z. A. Khan, U. Qasim, N. Javaid, “IDDR: Improved Density Controlled Divide-and-Rule Scheme for Energy Efficient Routing in Wireless Sensor Networks”, *The 9th International Conference on Future Networks and Communications (FNC)*, Niagara Falls, Canada, 2014.
- C3 A. Umar, M. A. Hasnat, **M. Behzad**, I. Baseer, Z. A. Khan, U. Qasim, N. Javaid, “On Enhancing Network Reliability and Throughput for Critical-Range Based Applications in UWSNs”, *The 9th International Conference on Future Networks and Communications (FNC)*, Niagara Falls, Ontario, Canada, 2014.
- C2 M. M. Sandhu, M. Akbar, **M. Behzad**, N. Javaid, Z. A. Khan, U. Qasim, “REEC: Reliable Energy Efficient Critical data routing in wireless body area networks”, *The 9th IEEE International Conference on Broadband and Wireless Computing, Communication and Applications (BWCCA)*, Guangzhou, China, 2014.
- C1 M. M. Sandhu, M. Akbar, **M. Behzad**, N. Javaid, Z. A. Khan, U. Qasim, “Mobility Model for WBAN”, *The 9th IEEE International Conference on Broadband and Wireless Computing, Communication and Applications (BWCCA)*, Guangzhou, China, 2014.

PAPERS IN
PREPARATION

- P1 **M. Behzad**, M. Masood, T. Ballal, M. Shadaydeh and T. Al-Naffouri, “Image denoising via collaborative support-agnostic recovery”, *U.S. Patent* [under preparation].
- J2 **M. Behzad**, M. Masood, T. Ballal, M. Shadaydeh and T. Al-Naffouri, “Image denoising via correlation based improved collaborative support-agnostic recovery”, *IEEE Transactions on Pattern Analysis and Machine Intelligence* [under preparation].

CONFERENCE
POSTERS

- CP1 **M. Behzad** and T. Al-Naffouri, “Minimum Distance Based Energy efficiency Using Hemisphere Zoning with Advanced Divide-and-Rule Scheme for WSNs”, in *6th Annual KFUPM Students Scientific Forum*, 2015.