

## Aimal Khan

Assistant Professor

College of Electrical & Mechanical Engineering

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## About

Dr. Aimal Khan is working as Assistant Professor in the College of Electrical & Mechanical Engineering. Dr. Aimal Khan has a PhD in Wireless Communication. Dr. Aimal Khan has published 29 research articles & conference papers having a citation count of 98, carried out 0 projects and filed 0 intellectual property.

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## Qualifications

<b>PhD in Wireless Communication</b> Universität Rostock , Germany	2008 - 2012
<b>MS in Communication Technology</b> Christian-Albrechts-Universität Kiel , Germany	2005 - 2007
<b>BS in Computer Engineering</b> University of Veterinary & Animal Science , Pakistan	2001 - 2005

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## Experience

<b>Assistant Professor</b> College of Electrical & Mechanical Engineering	2022- Present
<b>Assistant Professor</b> College of Electrical & Mechanical Engineering	2019 - 2022
<b>Assistant Professor</b> College of Electrical & Mechanical Engineering	2016 - 2019
<b>Assistant Professor</b> College of Electrical & Mechanical Engineering	2016 - 2016
<b>R&amp;D Engineer</b> Seleon pvt ltd Germany , Im zukunft 1, Heilbronn, Germany	2013 - 2016
<b>Engineer for Digital Systems D</b> CARE, Pakistan , islamabad	2005 - 2005

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## Awards

<b>Gold Medal</b> Obtained Gold Medal for securing first position in FSc Examination in the overall Malakand Board.	2001
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## Professional Memberships

PEC

## Research Articles

- Machine Learning and Signal Processing Based Analysis of sEMG Signals for Daily Action Classification** 2022  
*Sajid Gul Khawaja Muhammad Usman Akram Aimal Khan Arsalan Shaukat Ayesha Sadiq Norah Saleh Alghamdi*  
*IEEE Access*, Volume 10, Pages 40506-40516  
**Impact Factor:** 3.476 | **Quartile:** 2 | **Citations:** 8  
**DOI:** 10.1109/ACCESS.2022.3166885
- Automatic Diagnosis of Pneumothorax from Chest Radiographs: A Systematic Literature Review** 2021  
*Arsalan Shaukat Zartasha Mustansar Tahira Iqbal Muhammad Usman Akram Aimal Khan*  
*IEEE Access*, Volume 9, Pages 145817-145839  
**Impact Factor:** 3.367 | **Quartile:** 2 | **Citations:** 9  
**DOI:** 10.1109/ACCESS.2021.3122998
- Joint Energy Efficient Power and Subchannel Allocation for Uplink MC-NOMA Networks** 2020  
*Aimal Khan Bushra Rashid Ayaz Ahmad Sajid Saleem*  
*International Journal of Communication Systems*, Pages 1-18, Article Number e4606  
**Impact Factor:** 2.047 | **Quartile:** 3 | **Citations:** 8  
**DOI:** <http://dx.doi.org/10.1002/dac.4606>
- Approximate Proximal Gradient-Based Correlation Filter for Target Tracking in Videos: A Unified Approach** 2019  
*Aimal Khan Haris Masood Saad Rehman Farhan Riaz Ali Hassan Muhammad Abbas*  
*Arabian Journal for Science and Technology*, Volume 44, Issue 11, Pages 9363-9380  
**Impact Factor:** 1.711 | **Quartile:** 2 | **Citations:** 7  
**DOI:** 10.1007/s13369-019-03861-3
- Efficient Sizing and Placement of Distributed Generators in Cyber-Physical Power Systems** 2019  
*Faheem Ud Din Ayaz Ahmad Hameed Ullah Tariq Umer Shaohua Wan Aimal Khan*  
*Journal of Systems Architecture*, Volume 97, Pages 197-207  
**Impact Factor:** 2.552 | **Quartile:** 2 | **Citations:** 35  
**DOI:** 10.1016/j.sysarc.2018.12.004
- Energy-efficient resource allocation and RRH association in multitier 5G H-CRANs** 2019  
*Sher Ali Ayaz Ahmad Aimal Khan*  
*Transactions on Emerging Telecommunications Technologies*, Volume 30, Issue 1, Article Number e3521  
**Impact Factor:** 1.594 | **Quartile:** 3 | **Citations:** 17  
**DOI:** 10.1002/ett.3521
- On the mutual information of relaying protocols** 2018  
*Saad Rehman Aimal Khan Muhammad Abbas Ayaz Ahmad*  
*Physical Communication*, Volume 30, Pages 33-42  
**Impact Factor:** 1.451 | **Quartile:** 3 | **Citations:** 7  
**DOI:** 10.1016/j.phycom.2018.07.005
- Efficient motion estimation using two?bit transform and modified multilevel successive elimination** 2018  
*Farhan Hussain Mian Ilyas Ahmad Sajid Anwar Aimal Khan Pyoung Won Kim*  
*Journal of Ambient Intelligence and Humanized Computing*, pp 1–7  
**Impact Factor:** 1.910 | **Quartile:** 3 | **Citations:** 1  
**DOI:** 10.1007/s12652-018-0996-8
- Analysis of channel uncertainty in ARQ relay networks** 2018  
*Hina Ajmal Aimal Khan Saad Rehman Farhan Hussain Mohammad Alam Rupert Young*  
*PLoS ONE*, Volume 13(1), Article Number e0190622  
**Impact Factor:** 2.776 | **Quartile:** 2  
**DOI:** 10.1371/journal.pone.0190622
- Throughput improvement by reliability-dependent layer allocation in IDM** 2008  
*J.Ch. Fricke P.A. Hoeher Aimal Khan*  
*Electronic Letter*, Volume 44, Issue 16, Pages 958-960  
**Impact Factor:** 1.140 | **Quartile:** 2  
**DOI:** 10.1049/el:20081084

## Conference Proceedings

<p><b>Towards the Selection of the Best Machine Learning Techniques and Methods for Urinalysis</b></p> <p><i>Babar Zeb Aimal Khan Younas Khan Muhammad Faisal Masood Iqra Tahir Muhammad Asad</i></p> <p><i>12th International Conference on Machine Learning and Computing, res.country(48,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> <a href="https://doi/10.1145/3383972.3384031">https://doi/10.1145/3383972.3384031</a></p>	2020
<p><b>Towards the Selection of Best Machine Learning Model for Student Performance Analysis and Prediction</b></p> <p><i>Muhammad Faisal Masood Aimal Khan Farhan Hussain Arslan Shaukat Babar Zeb Rana Muhammad Kaleem Ullah</i></p> <p><i>6th International Conference on Soft Computing &amp; Machine Intelligence (ISCMI), res.country(247,)</i></p> <p><b>Citations:</b> 6</p> <p><b>DOI:</b> 10.1109/ISCMI47871.2019.9004299</p>	2019
<p><b>Denoising The Wireless Channel Corrupted Images Using Machine Learning</b></p> <p><i>Aimal Khan Muhammad Sufian Takreem Saeed Zirak Khan</i></p> <p><i>2019 20th IEEE/ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD), res.country(113,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> N/A</p>	2019
<p><b>Machine Learning Techniques for Heart Disease Datasets: A Survey</b></p> <p><i>Younas Khan Usman Qamar Nazish Yousaf Aimal Khan</i></p> <p><i>International Conference on Machine Learning and Computing (ICMLC), 2019, res.country(48,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1145/3318299.3318343</p>	2019
<p><b>A systematic literature review of continuous Blood glucose monitoring and suggesting-quantity of insulin for diabetic type 1 patient OR artificial pancreas</b></p> <p><i>Muhammad Asad Usman Qamar Rahmat Ullah Safdar Aimal Khan</i></p> <p><i>2019 11th International Conference on Machine Learning and Computing, res.country(48,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1145/3318299.3318352</p>	2019
<p><b>Blood Glucose Level Prediction with minimal inputs using feedforward neural network for diabetic type 1 Patients</b></p> <p><i>Muhammad Asad Usman Qamar Babar Zeb Younas Khan Aimal Khan</i></p> <p><i>2019 11th International Conference on Machine Learning and Computing, res.country(48,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1145/3318299.3318354</p>	2019
<p><b>Comparative study of local binary pattern and its shifted variant for osteoporosis identification</b></p> <p><i>Hina Ajmal Farhan Hussain Muhammad Abbas Saad Rehman Aimal Khan Rupert Young Mohammad S. Alam</i></p> <p><i>SPIE Defense + Security 2018 Conference, res.country(233,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1117/12.2304721</p>	2018
<p><b>ASIFT based recognition of fixed shape moving objects and tracking via modified particle filters</b></p> <p><i>Haris Masood Saad Rehman Aimal Khan Wasi Haider Rupert Young Phil Birch Mohammad Alam</i></p> <p><i>Pattern Recognition and Tracking XXIX, res.country(233,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1117/12.2304699</p>	2018
<p><b>Range Estimation in Radar using Maximum Likelihood Estimator</b></p> <p><i>Haleema Sadia Sabahat Sherien Hafsa Iqbal Muhammad Zeeshan Aimal Khan Saad Rehman</i></p> <p><i>20th International Conference of Computer and Information Technology (ICCIT), res.country(19,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> 10.1109/ICCITECHN.2017.8281856</p>	2017
<p><b>A Study on Uncertainties in Software Project Management in Pakistan</b></p> <p><i>Sara Tanvir Mamoon Saafdar Hanny Tufail Aimal Khan Muhammad Abbas</i></p> <p><i>International Conference on Engineering, Computing and Information Technology, res.country(157,)</i></p> <p><b>Citations:</b> N/A</p> <p><b>DOI:</b> <a href="https://www.researchgate.net/publication/330509417_A_study_on_Uncertainties_in_Software_Project_Management_in_Pakistan">https://www.researchgate.net/publication/330509417_A_study_on_Uncertainties_in_Software_Project_Management_in_Pakistan</a></p>	2017

<b>Analysis of power optimization in a 2-hop multiple relay network</b> <i>Aimal Khan Volker Kuehn</i> 2012 International ITG Workshop on Smart Antennas (WSA), res.country(57,) <b>Citations:</b> N/A <b>DOI:</b> 10.1109/WSA.2012.6181212	2012
<b>Performance Comparison of different Protocols for a Two-hop Multiple Relay Network</b> <i>Aimal Khan Volker Kuehn</i> 2012 International ITG Workshop on Smart Antennas (WSA), res.country(57,) <b>Citations:</b> N/A <b>DOI:</b> 10.1109/WSA.2012.6181209	2012
<b>Rate Optimization for Incremental Redundancy and Repetition Coding in Relay Networks</b> <i>Aimal Khan Volker Kuehn</i> European Signal Processing Conference, res.country(68,) <b>Citations:</b> N/A <b>DOI:</b> <a href="https://ieeexplore.ieee.org/document/7073991">https://ieeexplore.ieee.org/document/7073991</a>	2011
<b>Power Optimization in Adaptive Relay Networks</b> <i>Aimal Khan Volker Kuhn</i> GLOBECOM - IEEE Global Telecommunications Conference, res.country(233,) <b>Citations:</b> N/A <b>DOI:</b> 10.1109/GLOCOM.2010.5683506	2010
<b>Power Vs Relay Selection in Adaptive Relay Networks</b> <i>Aimal Khan Volker K "uhn</i> 2010 7th International Symposium on Wireless Communication Systems, res.country(231,) <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ISWCS.2010.5624285	2010
<b>Optimizing ARQ Strategies in Relay Networks</b> <i>Aimal Khan Volker Kuehn</i> 8th Intl. Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, res.country(75,) <b>Citations:</b> N/A <b>DOI:</b> <a href="https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&amp;arnumber=5520222">https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&amp;arnumber=5520222</a>	2010
<b>On the Performance of Adaptive Relaying with ARQ</b> <i>Aimal Khan Volker K "uhn</i> 2010 International ITG Workshop on Smart Antennas (WSA), res.country(57,) <b>Citations:</b> N/A <b>DOI:</b> 10.1109/WSA.2010.5456458	2010
<b>Mutual information based resource allocation in relay networks</b> <i>Aimal Khan Volker Kuhn</i> 8th International ITG Conference on Source and Channel Coding, res.country(57,) <b>Citations:</b> N/A <b>DOI:</b> N/A	2010
<b>Information Combining Based ARQ in Relay Networks</b> <i>Aimal Khan Volker Kiihn Sebastian Vorkoper</i> 2009 European Wireless Conference , res.country(59,) <b>Citations:</b> N/A <b>DOI:</b> 10.1109/EW.2009.5357981	2009