

SAIF UR REHMAN (PhD in Micro Electronics)

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OBJECTIVE:

To acquire a professional position in a creative and challenging environment, where I can utilize my educational and job experience and constantly learn, seek and apply my knowledge with a commitment to the company's excellence.

KEY SKILLS:

- Excellent analytical, leadership skills and technical report writing capabilities.
 - High level of planning, organizing and management skills and decision-making ability.
 - Willing to work with and learn new equipment and processes.
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WORK EXPERIENCE:

1. **Assistant Professor** in Faculty of Engineering at Superior University Lahore. **Feb 2015 – Present:**
 - **Program Manager** for Post Graduate (MS/PhD) Program. Aug 2021 – Present:
 - Focal Person for (**ORIC**) from FET Department. Aug 2021 – Present:
 - Focal Person for (**National Grassroots ICT Research Initiative**). Feb 2020 – Present:
 2. **June 2011 – Jan 2015:**
Lecturer in Electrical Engineering Department at University of Lahore (Islamabad Campus).
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ACADEMIC QUALIFICATIONS:

2013-2019: PhD in Electrical Engineering from Capital University, Islamabad, Pakistan.
2010-2012: MS in Electronics Engineering from Mohammad Ali Jinnah University, Islamabad, Pakistan
2006-2010: BS in Electronics Engineering from Mohammad Ali Jinnah University, Islamabad, Pakistan
2003-2005: BSc in Mathematics (A+B) and Physics from Govt. College, Khanewal

RESEARCH INTERESTS:

- SILICON CARBIDE MESFETS (AC DC Analysis)
 - Microwave and Millimeter Wave MMIC Design
 - New Technologies/Materials of Wide Bandgap Semiconductors
 - Design and Technology of Advanced Heterojunction Microwave Circuits and Devices
 - Nonlinear Device Modeling and Applications
 - Evolutionary Communication
 - Mathematical Modeling
 - Simulation of Circuits
 - Optimal Design
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ONLINE COURSES:

- Transmission Electron Microscopy for Materials Science by EPFL (Coursera)
 - Design Thinking Fundamentals by RITx (edX)
 - Design Thinking: Empathizing to Understand the Problem by RITx (edX)
 - Python Basics for Data Science by IBM (edX)
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TEACHING INTERESTS:

- Digital and Analogue Communication
 - Optimizations Techniques
 - Digital Logic Design
 - Applied Calculus
 - Complex Variables and Transforms
 - Wireless Communication Antenna Theory
 - Numerical Analysis
 - Probability and Random Processes
 - Differential Equations
 - Linear Algebra
 - Linear and Non-Linear Circuit Analysis
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TOOLS AND SKILLS:

- Advanced Design System
 - Mat lab
 - Visio
 - Latex
 - Circuit Maker (Analog & Digital)
 - OriginLab (For high quality graphs)
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ACHIEVEMENTS:

- Higher Education Commission (HEC) Approved PhD Supervisor
 - Focal Person for University of Lahore (National Grassroots ICT Research Initiative)
 - Focal Person for ORIC from Engineering Department
 - Participated as a Speaker in 9th Saudi Arabia Smart Grid Conference (SASG 2019)
 - Worked as a EE Labs Incharge
 - Worked as a Head of Final Year Project Committee
 - Worked as Industrial Liaison Officer
 - Arranged Different Seminars and Conferences at University of Lahore
 - Member of Technical and Organizing Committees of International Conference on Engineering and Emerging Technologies (ICEET)
 - Member of Pakistan Engineering Council (PEC)
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PUBLICATIONS:

Journal Articles

1. **S. Rehman**, M. M. Ahmed, U. Munir, and M. Naeem "A nonlinear model to assess DC/AC performance reliability of submicron SiC MESFETs," Journal of Computational Electronics, vol. 121, pp 1-11, 2018. (I.F 1.88)
2. **S. Rehman**, M. M. Ahmed, U. F. Ahmed, and M. Naeem "Temperature dependent analytical model for wide band gap MESFETs," IEEE access, 2019. (I.F 4.48)
3. **S. Rehman**, M. M. Ahmed, U. F. Ahmed, and U. Rafique "An Improved Space Charge Distribution Analytical Model to Assess FET's Intrinsic Capacitors," Turkish Journal of Electrical Engineering &

4. M. Naeem, U. F. Ahmed, M. M. Ahmad and **S. Rehman**, “An improved model to assess temperature-dependent DC characteristics of submicron GaN HEMTs, "Journal of Computational Electronics, vol.16. no. 3, pp. 653–662, 2018. (I.F 1.88)
5. M. Naeem, U. F. Ahmed, M. M. Ahmad and **S. Rehman**, “Simulation and Comparative Analysis of Submicron GaN HEMTs DC Characteristics for CAD, "Journal of Computational Electronics, 2019. (I.F 1.88)
6. M. Naeem, U. F. Ahmed, M. M. Ahmad and **S. Rehman**, “An Improved Temperature Dependent Analytical Model to Predict AlGaIn HEMTs AC Characteristics, “International Journal of Numerical Modelling, 2019. (I.F 0.833)
7. B. Masood, M. A Khan, S. Baig, S. Guobing, A. Rehman, **S. Rehman**, R. M. Asif and M. B. Rasheed, “Investigation of Deterministic, Statistical and Parametric NB-PLC Channel Modeling Techniques for Advanced Metering Infrastructure, “MDPI Energies-Open Access Journal, 2020, vol. 13, Issue 12, 3098. (I.F 2.707)
8. Rao M. Asif, Ateeq Ur Rehman, **S. Rehman**, Jehangir Arshad, Jamshaid Hamid, Muhammad Tariq Sadiq and Sohaib Tahir “Design and analysis of robust fuzzy logic maximum power point tracking based isolated photovoltaic energy system, “Engineering Reports-Open Access Journal Willey, 2020.
9. Rao M. Asif, Adnan Yousaf, Ateeq Ur Rehman, Hafiz M. Ashraf, **S. Rehman**, “Designing of Control Scheme for Hybrid Power System Using Fuzzy Logic Controller”, New Horizon, IEEP. Pakistan 2019.
10. Rao M. Asif, Adnan Yousaf, Ateeq Ur Rehman, Hafiz M. Ashraf, **S. Rehman**, “Real Time Extra Economic Dispatch for Renewable Energy Uncertainty Over IEEE Bus Bar”, New Horizon, IEEP, 2019.

Conference Proceedings

1. **S. Rehman**, U. Rafique, U.F.Ahmed, M. Naeem, and M. M. Ahmed, “Effects of Substrate on the AC Performance of Submicron GaN HEMT,” *Proceedings of IEEE International Conference on Emerging Technologies (ICET 2017)*.
2. **S. Rehman**, H. F. Usman, R. M. Asif, and H.M. Ashraf. “Performance Evaluation of Submicron SiC MESFET,” *In proceedings of 6th International Conference on Electrical Engineering Congress (iEECON 2018)*.
3. **S. Rehman**, Hafiz Fuad Usman, Umer Farooq Ahmed, M. Asif and Soo Young Shin, “An Improved Technique to Assess AC Performance of a Submicron GaN HEMTs” *The 10th International Conference on Information and Communication Technology Convergence (ICTC 2019)*.
4. **S. Rehman**, Wardah Ali, Khujasta Khalid, Omer Farooq and Urfan Mahmood “Design and Comparative Analysis of 2.45 GHz Rectangular Microstrip Patch Antenna,” *In proceedings of 6th International Conference of Engineering and Emerging Technologies (ICEET 2020)*.
5. U. F. Ahmed, **S. Rehman**, U. Rafique and M. M. Ahmad “AlGaIn/GaN FinFET: A Comparative Study” *In proceedings of 14th International Conference on Emerging Technologies (ICET 2018)*.
6. M. Awais, **S. Rehman**, M. Asif, M.R. Usman and Soo Young Shin. “RF Energy Harvesting for Low Power Applications Using Rectenna Operating at 2.45 GHz,” *The 10th International Conference on Information and Communication Technology Convergence (ICTC 2019)*.
7. Umer Farooq Ahmed, **S. Rehman**, Zia Hameed, Faiza Ahmed, Terence Anthony U’Chong and Malik Muhammad Aarsal Asif “Design and Development of Control System for Unmanned Ground Vehicle and its Manipulator” *In proceedings of 6th International Conference of Engineering and Emerging Technologies (ICEET 2020)*.
8. Faiza Ahmed, Zia Hameed, **S. Rehman**, “Efficiency Enhancement of a Hybrid Power System using Lead-Lag Compensator (LLC)” *In proceedings of 6th International Conference of Engineering and*

Emerging Technologies (ICEET 2020).

9. Faiza Ahmad, Hina Maqbool, **S. Rehman**, Adnan Yousaf and Zia Hameed, "Prevention of Non-Technical Losses in Pakistan Using Smart Meters" *In proceeding of The 9th Saudi Arabia Smart Grid Conference (SASG 2019).*
10. H. M. Ashraf, G. Abbas, U. Ali, and **S. Rehman** "Modeling and Simulation of Optical Current Transformer using Operational Amplifiers" *In proceedings of International Conference on Electrical Engineering (ICEE 2017).*
11. M. Z. Babar, **S. Rehman**, R. Khan and W. Afzal, "Robust Control of UAVs using MIMO Sliding Mode Control" *In proceedings of 2nd International Conference on Engineering and Emerging Technologies (ICEET 2015).*
12. U. Rafique, H. Kahlil, and **S. Rehman**, "Dual-Band Microstrip Patch Antenna Array for 5G Mobile Communications," *In proceedings Electromagnetics Research Symposium Singapore (PIERS 2017).*
13. H. F Usman, S. Hamid, W. A. Khan and **S. Rehman**, "Smart Grid Intelligent Energy Management System with Cost Optimization in Power System" *In proceedings of Advances in Science and Engineering Technology International Conferences (ASET 2019).*
14. T. Mujahid, T. M. Gondal, H. Bashir, Aisha and **S. Rehman**, "Cost Effective Automated Monitoring System for Induction Motor Faults" *In proceedings International Conference on Emerging Trends in Smart Technologies (ICETST 2020).*
15. A. B. Siddique, M. A. Khan, A. Asad, A Rehman, R. M. Asif and **S. Rehman**, "Maximum Power Point Tracking with Modified Incremental Conductance Technique in Grid-Connected PV Array" *In proceedings 5th International Conference on Innovative Technologies in Intelligent Systems and Industrial Applications (CITISIA 2020).*
16. Faiza Ahmed, Zia Hameed, **S. Rehman**, Zubair Ghafoor, "Normal/Abnormal Magnetic Resonant Brain Images Detection Based on Supervised Classifiers" *In proceedings International Conference on Computing and Information Technology (ICCIT-2020)*
17. Zia Hameed, Faiza Ahmed, **S. Rehman**, Zubair Ghafoor, "IoT Based Communication Technologies to Integrate and Maximize the Efficiency of Renewable Energy Resources with Smart Grid" *In proceedings International Conference on Computing and Information Technology (ICCIT-2020)*

REFERENCES:

- Dr. Fazal-ur-Rehman
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- Dr. Mustafa Shakir
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