# Hatif Bin Abdul Majeed

- <u>hbinabd@ncsu.edu, hatif.majeed@au.edu.pk, hmajeed@asu.edu</u>
- +1-984-288-6390
- 1110 Carlton Avenue, APT 302, Raleigh, NC. 27606

#### **Academics**

Jan 2022 – Jan 2025

Ph.D. Electrical Engineering, NC State University, Raleigh, NC, United States

(CGPA: 4.00/4.00)

Apr 2018

MS Energy Systems Engineering, USPCAS-E, NUST, Islamabad, Pakistan

(CGPA: 3.80/4.00)

Jul 2014

B.Sc Electrical Engineering, University of Engineering & Technology, Taxila, Pakistan (CGPA: 3.40/4.00)

### **Experiences**

Sep 2018 -Till Date

#### Lecturer

Department of Electrical & Computer Engineering, Air University, Islamabad, Pakistan

- Lead Instructor for various electrical engineering subjects: Digital Logic Design, Electrical Machines etc.
- Supervisor of multiple research and senior design projects
- · Administrative tasks and Secretary Faculty Board of Studies and Departmental Board of Studies

Jan 2021 -

#### Assistant Manager (Operations) / Sub-divisional Officer

April 2021

Lahore Electric Supply Company (LESCO), Queens Road, Lahore, Pakistan

Jan 2017 -May 2017

## Research Exchange Scholar

Photovoltaic Reliability Lab, Arizona State University, Mesa, United States

- Performed various tests on PV modules such as EL tests, IR tests, UV tests and accelerated stress tests
- Collaborated with technical managers and developed knowledge of qualification and certification testing
- Led two research projects resulting in two conference publications

May 2013 -June 2013

#### Internship

1600 MW Thermal Power Plant, Mehmood Kot, Muzaffargarh, Pakistan

- Participated in testing and modifying electrical machinery and equipment.
- Monitored power factor in electrical supply system
- Participation in documentation and preparation of technical reports for NPGCL HQ's.

## **Publications (Conference Proceedings)**

Dec. 2021 W. Iqbal, **Hatif Bin Abdul Majeed**, A. Khan, IM Qureshi, "*Performance Evaluation of Third Harmonic Injection PWM Technique for Three Phase Multilevel Inverter*," 2021 IEEE International Conference on Frontiers of Information Technology (FIT), December 2021, Islamabad, Pakistan.

April 2021 Hatif Bin Abdul Majeed, A. Khan, W. Iqbal and H. A. Khalid, "Vector Proportional Integral Controller in Series Connected Custom Power Device for Voltage Quality Enhancement," 2021 IEEE International Conference on Emerging Power Technologies (ICEPT), 2021, pp. 1-5. https://doi.org/10.1109/ICEPT51706.2021.9435595

Mar. 2018 S. Ali, A. Ali, S. Saher, H. S. Agha, **Hatif Bin Abdul Majeed**, F. I. Mahmood, & G. TamizhMani, "A comprehensive study of 18–19 years field aged modules for degradation rate determination along with defect detection and analysis using IR, EL, UV," in Proc. International Bhurban Conference on Applied Sciences Technology, Islamabad, Pakistan, Mar. 2018, pp. 28–35. <a href="https://doi.org/10.1117/12.2281840">https://doi.org/10.1117/12.2281840</a>

Feb. 2018 Hatif Bin Abdul Majeed and H. A. Khalid, "On Proportional Resonant Controller for Voltage Dip Mitigation using Dynamic Voltage Restorer", in Proc. Energy Systems for Sustainable Development, Lahore, Pakistan, Feb. 2018, pp. 43-48. https://lahore.comsats.edu.pk/essd2017/downloads/ConferenceProceedings-ESSD2017.pdf

Aug. 2017 F Mahmood, **Hatif Majeed**, T Curtis & GS Tammizhmani, "Temperature coefficient of power (Pmax) of field aged PV modules: impact on performance ratio and degradation rate determinations," in Proc. SPIE 10370, Reliability of Photovoltaic Cells, Modules, Components, and Systems X, Aug. 2017, pp. 22–28. https://doi.org/10.1109/IBCAST.2018.8312180

#### **Projects**

2019-2020 Active and Reactive Power Control through Distributed Power Flow Controller

Supervisor of Undergraduate Senior Design Project at Air University, Islamabad

2017-2018 Performance improvement of multilevel inverter using third harmonic injection technique

Supervisor of MS Thesis Student at Air University, Islamabad

2017-2018 PI based Pitch angle control of Wind Turbine

Supervisor of MS Thesis Student at Air University, Islamabad

2017	Temperature Coefficient of Field Aged PV Modules Impact on Degradation Rate Determinations Research Project as Research Exchange Scholar at Photovoltaic Reliability Lab, Arizona State University, USA
2017-2018	Performance Comparison of Linear Controllers for Voltage Dip Mitigation using DVR MS Thesis at USPCAS-E, NUST, Islamabad, Pakistan
2013-2014	Application of FACTs Devices Simulation of IPFC and UPFC on NTDC Network Final Design Project at UET Taxila, Pakistan

# **Certifications & Trainings**

Oct – Nov 2021	Decarbonizing the Smart Grid for Sustainable Living arranged by XJTU, Hong Kong Polytechnic University
Jan 2021	Induction Course for Assistant Manager (E) Regional Training Center, Lahore Electric Supply Company (LESCO)
May 2017	Technology Entrepreneurship at Arizona State University, Tempe, United States
May 2017	Photovoltaic Reliability Lab Training at Arizona State University, Mesa, United States

## **Honors & Awards**

Nov 2020	Fulbright Scholarship Grantee for PhD Fulbright Grantee for PhD at United States (2021 Cohort)
Feb 2018	Best Poster Presentation Award International Conference on Energy Systems for Sustainable Development 2018, CIIT, Lahore, Pakistan
Jan 2017	Research Exchange Scholarship USAID-HEC (Exchange Scholar at Arizona State University, Mesa, United States) in Photovoltaic Reliability Lab (supervised by Dr. GovindaSamy TamizhMani)

#### Standardized Tests

Dec 2020	<b>TOEFL</b> ; R:23, L:27, W:25, S:22, Overall: 97
Nov. 2019	GRE (General); ETS, Q:156, V:155, AWA:3.5, Overall: 311
July 2019	IELTS (Academic); R:8.5, L:8.5, W:6.5, S:7.0, Overall: 7.5

# Skills and Research Interests

- Proficient in MATLAB, PLECS, LabVIEW, PSCAD
- Research experience in renewable energy, power, and control systems
- · Capable of managing crucial project and proficient in technical writing and reporting

## **Extracurricular Activities and Interests**

- Former member of English Editorial Board for UET Magazine "Almuhandis"
- Former member of UET Adventure Club
- Office bearer at NUST Community Services Club
- Organized Pakistani culture day in Arizona State University, Tempe, Arizona
- Departmental Team Manager for Athletics in Air University Sports Week
- Hiking, cooking and music

#### References

 Muhammad Hunzala Javed – Assistant Director Technical (Systems) – Pakistan Telecommunication Authority (PTA)

Cell: +92-331-9684909, Email: <a href="mailto:hunzalajaved@pta.gov.pk">hunzalajaved@pta.gov.pk</a>

- Dr. Zeljko Pantic Associate Professor North Carolina State University Cell: +1-919-593-4052, Email: <a href="mailto:zpantic@ncsu.edu">zpantic@ncsu.edu</a>
- Dr. Muhammad Zaheer Assistant Professor Air University Islamabad Cell: +92-333-5353996, Email: <u>MZaheer@mail.au.edu.pk</u>