# Muhammad Waseem

ELECTRICAL ENGINEER PEC Reg# ELECT/43096

# **CONTACT INFORMATION:**

Address: Village Parona, P.O Saidu Sharif, Tehsil Babozai, Dist. Swat.

Cell no: +923445379007 Phone no: +92946-860303

E-Mail: <u>syedwaseem422@gmail.com</u>,

# **CAREER OBJECTIVE:**

To gain a position in a growth-oriented organization that utilizes my knowledge and skills to best serve its needs and leads to my involvement in decision-making process in both technical and managerial fields.

# **EDUCATION**

DEGREE	OBTAINED MARKS/GPA	INSTITUTE/BOARD/UNIVERSITY
Matric (Science).	<b>740</b> /900 (82%)	Swat Public School. Swat
F.Sc (Pre-Engineering)	844/1100 (76.7 %)	SPS & College Swat.
B.Sc. Electrical (July 2014) Engineering(Power)	<b>2.95</b> CGPA (73%)	COMSATS Institute of Information Technology, Abbottabad.
MS (Electrical Engineering)	<b>3.48</b> CGPA (78.1%)	COMSATS Institute of Information Technology, Abbottabad.

## **SKILLS**

Field of Interest	Certification*	Miscellaneous
AC/DC Machines, Power Electronic Converters, Power Generation,	PLC (SCADA)	Microsoft Office. (Word, PowerPoint, Excel) MATLAB
Social Skills Interests		Subjects of Interest
Good communication skills & ability	Reading Books, Articles related to	Machines, Power

<sup>\*</sup>Recently completed a certification course from Institute of Signals Systems and Soft skills (ISSS)
Rawalpindi in Industrial Automation using PLC (SCADA).

#### FINAL YEAR PROJECT

MATLAB Base Maximum Power Point Tracking for Photovoltaics Standalone/Grid Connected System.

The objective of the FYP was to analyze different MPPT techniques on their merits and demerits and perform a comparative study. As the project progressed our objectives got broader and a Power Management System (PMS) was designed that included renewable energy sources with MPPT, storage devices and AC power supply. The main task of the PMS was to deliver the required power to the load from any of the available sources. The project was simulated in MATLAB Simulink.

## **MS THESIS**

Generation of electrical energy from the depleting fossil fuels has adversely affected our environment. The emission of carbon-dioxide gas into the atmosphere and the residual waste of these fuels are a major concern. Thus, there is global shift towards more clean and sustainable sources of energy like solar, wind, geo-thermal etc. In order to integrate these alternative sources of energy into a power system they require power electronic converters. The converters used traditionally have single input and single output ports therefore separate converters are installed for each alternative source. This approach makes the overall system very complex. To avoid the unnecessary complexity Multiple Input and Multiple Output (MIMO) converters were developed. The main objective of my MS research is to design a simple MIMO converter employing a single inductor and lesser number of Components for multiple outputs.

# **REFERENCES:**

## Dr. Abdul Majid

Assistant Professor Department of Electrical Engineering.

COMSATS Institute of Information Technology, Abbottabad.

**Email:** a\_majid@ciit.net.pk **Phone:** +92-992-383591-5

**Specialization:** Power Electronics

#### Dr. Jawad Saleem

Assistant Professor.

Department of Electrical Engineering.

COMSATS Institute of Information Technology, Abbottabad.

**Email:** jawadsaleem@ciit.net.pk **Phone No:** +92-992-383591-5

**Specialization:** Power Electronics