# MUHAMMAD AZIZ UL HAQ

CONTACT	Permanent Address: C/o Zamurrad Hussain Brigade road Bhimber AK
INFORMATION	Mailing Address: C/o Zamurrad Hussain Brigade road Bhimber AK Email <u>azizulhaq127@gmail.com</u>
	<b>Mobile Number :</b> +92-346-4408717
EDUCATION	<b>2014–2016</b> Masters in <b>Electrical Engineering (Specialization in Signal Processing and Machine Learning),</b> E&ME (National University of science and technology), Rawalpindi, Pakistan <b>CGPA: 3.2/4.00</b>
	<ul> <li>2010 – 2014 Bachelor in Electronics Engineering, Capital University of science and technology (previously MAJU), Islamabad, Pakistan</li> <li>CGPA: 3.32/4.00</li> </ul>
RESEARCH PUBLICATIONS	<ul> <li>Journal Publication on "Indoor Localization using Improved Weighted Naïve Bayes" at International Journal of Computer Science and Information Security, IJCSIS ISSN 1947-5500, impact factor 0.553.</li> <li>Publication on "Indoor localization using improved multinomial Naïve Bayes" at Springer sponsored conference 3rd Afro-European Conference for Industrial Advancement (AECIA).</li> <li>Publication on "Smart Solar AC Generator" at IEEE conference Power Generation Systems and Renewable Energy Technologies (PGSRET).]</li> <li>"Comparative study of classification techniques for indoor localization of mobile devices" in Proceedings of the 28th International Telecommunication Networks and Applications Conference, 2018</li> </ul>
RESEARCH INTERESTS	<ul> <li>Control Systems</li> <li>Stochastic Systems</li> <li>Machine learning</li> <li>Parameter Estimation (in Diesel engine)</li> <li>Renewable Energy Resources</li> </ul>
WORK EXPERIENCE	<ul> <li>Working as a Lecturer in COMSATS University Islamabad, from April 2018.</li> <li>Worked as a Research Associate in ETL BIOMISA lab, NUST College of EME from July 2014 to December 2017.</li> </ul>
BACHELOR'S FINAL YEAR PROJECT	Smart solar AC generator without inverter and solar tracking system

MASTER'S THESIS	Indoor localization using Machine learning
PROJECTS AND CERTIFICATES	<ul> <li>Robotic arm using 8051 microcontrollers.</li> <li>State Feedback Controller for linear and non-linearized system.</li> <li>Output Feedback Controller for linear and non-linearized system.</li> <li>Integral control on State Feedback Controller for linear and non-linearized system.</li> <li>Servomechanism on State Feedback Controller for a linear system.</li> <li>For a real-time system designing of Integral Control for Full order and Minimum Order Observer.</li> <li>LQR and LQG Tracking and Disturbance rejection on a real-time system.</li> <li>Analysis of 3d Gyroscope using Ansys and MATLAB</li> <li>Parameter analysis on Diesel engine.</li> <li>Chi-square test on random data.</li> <li>Linear forward and linear backward prediction using LMS, Weiner and NLMS</li> </ul>
	<ul> <li>Filters.</li> <li>Tracking of Noisy sinusoid using SSRLS and KALMAN Filters</li> <li>Attended a workshop for one credit point on Software defined Radio Prototyping held on June 3, 2014 at Mohammad Ali Jinnah University, Islamabad by Continuing Professional Development Program, CPD Program.</li> <li>Attended a short course on "Energy Tool and Techniques" held on September 26, 2012 at Mohammad Ali Jinnah University, Islamabad by ENERCON.</li> </ul>
AWARDS & ACHIEVEMENTS	<ul> <li>Vice President at Engineer's Voice Muhammad Ali Jinnah University, Islamabad.</li> <li>Won Dean's Honor Roll in 2011 in Muhammad Ali Jinnah University, Islamabad.</li> <li>Won Dean's Honor Roll in 2012 in Muhammad Ali Jinnah University, Islamabad.</li> </ul>
MAJOR SUBJECTS	<ul> <li>Control Systems</li> <li>Digital Signal Processing</li> <li>Power Generation</li> <li>Adaptive filters</li> <li>Detection and Estimation</li> <li>Stochastic Systems</li> </ul>
TECHNICAL SKILLS	<ul> <li>Python</li> <li>MATLAB</li> <li>LAB VIEW</li> <li>Arduino</li> <li>Microsoft Visual studio C++</li> <li>ANSYS</li> <li>Proteus circuit designing</li> </ul>

- Packet tracer
- AutoCAD
- MS office

# REFERENCES

## Dr. Aamer Iqbal Bhatti,

Professor, Capital University of Science and Technology, Islamabad Email: <u>aib@cust.edu.pk</u>

### Dr. Muhammad Younus Javed (Vice Chancellor)

Professor, Mirpur University of Science and Technology, Mirpur AJK , Pakistan. Email: <u>myjaved@hitecuni.edu.pk</u>

## Dr Muhammad Usman Akram

Associate Professor, College of Electrical and Mechanical Engineering, National University of Science and Technology, Rawalpindi Email: <u>usmakram@gmail.com</u>