

## Karachi, Pakistan

Education	<b>Glulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI)</b> <i>Top engineering institution ranked by Higher Education Commission (HEC) in Pakistan</i> Bachelors of Science in Mechanical Engineering <b>CGPA: 3.89 / 4.00 (Top position in department out of a 100 students)</b>	Pakistan 2014 – 2018
	<b>Nixor College</b> GCE Advanced Level <b>Grades: 4 A*'s, 1 A</b>	Pakistan 2012 – 2014
Work Experience	<b>Operations Engineer, United Energy Pakistan Limited</b> -formerly BP Pakistan - Daily allocating oil, water and gas production to each reservoir in Badin, Digri, KN and MKK in line with their well tests and booking reservoir gain/loss according to their downtime/uptime during 24 hour cycle. - Monitoring and reporting of oil inventory at each facility and managing bowser logistics efficiently to avoid feed curtailment. - Generating Weekly Key well report- highlights major production changes and oppurtunities for improvement.	July 2018-Present
	<b>Supply Services Intern, Reckitt Benckiser</b> - Optimized manufacturing lineup and embellishment process through automation. - Led to savings of PKR 5 million (\$30,000)/year on three power brands: Harpic, Dettol & Veet.	July-Sep, 2017
	<b>Intern, Advance Electronics International</b> - Gained a basic understanding of the workings of generators, pumps, and elevators.	June-July, 2015
	<b>Teaching Assistant for Further Maths &amp; Physics, Nixor College</b> - Conducted classes for students requiring extra help. Also conducted one-to-one sessions daily. - Taught independently in teacher's absence & assisted in grading exams and compiling worksheets.	2012-2014
Academic Projects	<b>Real Time Control of 1 Degree of Freedom (DOF) free-to-pitch Tailplane</b> Capable of maintaining desired pitch angle in the presence of varying wind speeds. Robust system with low overshoots.	
	<b>A Cost-Effective 3D Scanning Solution for University Labs (Final Year Project)</b> A low-cost, portable scanner controlled using Raspberry Pi capable of high quality scans. Played a pivotal role in winning a grant of 100 million PKR (0.6 million USD) from the government.	
	<b>Active Pressure Control of a Vessel</b> By controlling solenoid valves connected to a higher pressure vessel and atmosphere, the system maintains pressure within the specified range.	
	<b>Earthquake Forecasting System</b> By making use of strategically placed sensors and accounting for the difference in speeds of body waves and surface waves, the system is able to issue a warning in advance.	
Publication	<b>M. Z. Khan, Y.Ali, H.Sultan, M.Hasan, B.Salar. "Future of Currency: A Comparison between Traditional, Digital Fiat and Cryptocurrency Exchange Mediums," International Journal of Blockchains and Cryptocurrencies By Inderscience Publisher.</b>	
Award & Achievements	- 1st position holder (Gold Medalist) out of a 100 students in Faculty of Mechanical Engineering (GIKI) - Awarded multiple merit based scholarships during undergraduate degree - <b>Winner of Reckitt Benkiser's nation-wide competition: League of Game Changers (PKR 0.5 million awarded)</b> <i>Devised an innovative engineering solution to improve sanitation facilities in rural areas of the country. It has been successfully implemented in 70+ villages across the country in collaboration with Save the Children Fund.</i> - Event Coordinator, Design, Build and Fly Competition (DBFC) 2017 - Technical Head, The American Institute of Aeronautics and Astronautics (AIAA)- GIKI Chapter - On Dean's Honor Roll in all Semesters	
Professional Memberships	- Member, American Society of Mechanical Engineers (ASME) - Member, American Institute of Aeronautics and Astronautics (AIAA) - Member & Registered Engineer, Pakistan Engineering Council (PEC)	
Others	<b>GRE: Q:167 V:157 A:4.0   TOEFL: 109</b> - MATLAB, Simulink, Engineering Equation Solver - Microcontroller Interfacing: Raspberry Pi & Arduino. Programming Language: C++ - Solid Works, Creo Parametric, AutoCAD, ANSYS Workbench (Static Structural) - Certified in Microsoft Excel. Proficient in MS Powerpoint and Word.	