

# Ahmad Zahid Rao

Contact Number: +92 312 4269904

Email: ahmadrao@neduet.edu.pk, LinkedIn: www.linkedin.com/in/ahmadrao

<b>Education</b>	<b>PhD, Biomedical Engineering</b> <i>NED University of Engineering &amp; Technology, Karachi, Pakistan</i>	<b>2021</b> (expected)
	<b>PGD, Supply Chain Management</b> <i>Pakistan Institute of Management, Karachi, Pakistan</i>	<b>2016</b>
	<b>MS, Biomedical Engineering</b> <i>New Jersey Institute of Technology, New Jersey, USA</i>	<b>2015</b>
	<b>BE, Biomedical Engineering</b> <i>NED University of Engineering &amp; Technology, Karachi, Pakistan</i>	<b>2013</b>
<b>Academic Experience</b>	<b>Lecturer</b> , Department of Biomedical Engineering, NED University (Karachi, Pakistan)	Jun 2020 – Present
	<u>Teaching assignments:</u> BM-130 Computer Aided Engineering Graphics (Spring'2020) BM-404 Biomechanics (Spring'2020)	
	<b>Lecturer</b> , Biomedical Engineering, Barrett Hodgson University (Karachi, Pakistan)	Oct 2016 – Jun 2020
	<u>Teaching assignments:</u> PHC-101 Applied Physics (Fall'17) ELE-101 Basic Electrical Engineering (Spring'18) ELE-201 Circuit Analysis (Fall'18) BME-201 Computer Aided Engineering Drawing (Fall'18) BME-204 Bioinstrumentation – I (Spring'19) ELE-301 Microprocessor and Interfacing (Fall'19) MTH-111 Multivariate Calculus (Fall'19) [for BS Computer Science students]	
	<u>Administrative assignments:</u> <ol style="list-style-type: none"><li>1. Member, BHU Labs Committee.</li><li>2. Member, DBME Board of Studies.</li><li>3. Member, DBME Industrial Advisory Board.</li><li>4. Member, DBME Labs Coordination Committee.</li><li>5. Member, DBME Field Visits / Internship Committee.</li><li>6. Member, Ethical Review Committee, BHU.</li><li>7. Coordinator, Pakistan Engineering Council (PEC) for MOS exam at BHU.</li><li>8. Member, Internal HR Committee, BHU.</li><li>9. Member, Academic Council (2017), BHU.</li><li>10. Member, Board of Faculty, Faculty of Engineering, BHU.</li><li>11. Member, Board of Studies, Department of Biosciences, BHU.</li><li>12. Interim Chairperson, Department of Biomedical Engineering (Nov'16-Jan'17).</li></ol>	
	<b>Engineering Researcher</b> , Rehabilitation Engineering Research Center, NJIT (NJ, USA) Worked on investigating the limitations of a compliant human-robot interaction and the techniques to overcome those limitations. The aim was to develop robotic assistive devices that mimics passive human motion for patients with little or no ambulation. <b>MS Thesis:</b> “Realization of Dynamixel Servo Plant Parameters to Improve Admittance Control for a Compliant Human-Robot Interaction”	Jan-Dec 2015

	<p><b><u>Teaching / Educational Assistant</u></b>, <i>Center for Pre-College Programs, NJIT (NJ, USA)</i>          Worked as Teaching Assistant for the pre-college Robotics program.          Worked on updating the Medical Robotics professional development course called ‘Virtual Medibotics’, designed for high-school and middle-school teachers.</p>	<p><i>Jan-Aug 2015</i></p>
<p><b>Industry Experience</b></p>	<p><b><u>Biomedical Engineer</u></b>, <i>The Indus Hospital (Karachi, Pakistan)</i>          Looked after the <i>Rehabilitation Department</i> for proper training, operating and maintenance of the rehabilitation diagnostic and therapeutic equipment. Received trainings on:</p> <ul style="list-style-type: none"> <li>• Audiometry equipment by MAICO Diagnostics GmbH, Germany</li> <li>• Functional Electrical Stimulation (FES) machine by Restorative Therapies Inc., USA.</li> </ul> <p>Also managed the monthly <i>Planned Preventive Maintenance (PPM)</i> for the entire hospital’s medical equipment in coordination with department staff, and the monthly <i>Progress Report</i> from the Biomedical Department of all campuses of Indus Hospital Network.</p>	<p><i>Mar-Oct 2016</i></p>
	<p><b><u>Biomedical Engineer</u></b>, <i>Medinostic Healthcare, Pvt Ltd (Karachi, Pakistan)</i>          Worked with the Critical Care division, in providing live demonstrations, trainings, testing, installations and troubleshooting the Patient Monitors and Anesthesia Machines.          Played key role in developing the monthly e-newsletter for the same division with a marketing and biomedical engineering point of view in consultation with the specialists.</p>	<p><i>Jan-May 2014</i></p>
	<p><b><u>Trainee Biomedical Engineer</u></b>, <i>Noor International, Pvt Ltd (Karachi, Pakistan)</i>          Assisted with diagnosis, troubleshooting and testing of various Critical Care medical equipment including Ventilators, Anesthesia Machines, Patient Monitors, Syringe and Infusion Pumps, Diathermy units, OT lights and tables.</p>	<p><i>Jul-Nov 2013</i></p>
<p><b>Volunteer Experience</b></p>	<p>MATLAB Tutor, Graduate Biomedical Engineering Society, NJIT (<i>NJ, USA</i>)          President, Graduate Biomedical Engineering Society, NJIT (<i>NJ, USA</i>)          Assisted with Duchenne Muscular Dystrophy patients’ experimental trials, NJIT (<i>NJ, USA</i>)          Event Supervisor, New Jersey Science Olympiad (<i>NJ, USA</i>)          Volunteer, Pakistan Society of Anesthesiologists (<i>Karachi, Pakistan</i>)</p>	