# Hamood Ur Rehman

# **Personal Details**

Gender	:	Male
Nationality	:	Pakistani
LinkedIn	:	www.linkedin.com/in/hamoodurrehmanshaikh/

# **Career Objective**

An engineer continuously looking to work in a fast and challenging environment that compliments with my thirst for knowledge and helps me to grow personally and professionally as per my motto of KAIZEN. Moreover, to be in constant pursuance of deciphering secrets of our world with engineering perspectives.

### Awards and Accomplishments

- Awardee of Stipendium Hungaricum Scholarship
- Researcher at GTT-BME
- Co-organizing International Conference on Design, Mechanical and Material Engineering (d2me) at Budapest University of Technology and Economics

## **Career & Experience**

2018-to date Lecturer	<b>NED University of Engineering and Technology, Karachi.</b> Department of Industrial and Manufacturing Engineering.	
	<ul><li>Taught Undergraduate Courses.</li><li>Lab Facilitator for CAD/CAM Laboratory</li></ul>	
2015 – 2016 Senior Production Planning Officer	<ul> <li>Midas Safety Ltd., Karachi.</li> <li>Planning and Co-ordination Department</li> <li>Planning and Co-coordinating activities to ensure proper and effective production at Machine Knitting Unit (about 650 SHIMA SFG Knitting machines) as per demand both for in-house and export orders.</li> <li>Ensuring 100% OTIF (ON TIME IN FULL) by monitoring and controlling all activities from order acceptance to shipment.</li> </ul>	

	<ul> <li>Day to day follow-up of activities (Plan vs. Actual) to ensure that production process stays in-line with plan to meet targets.</li> <li>Working to solve the complaint on parts by both internal and external customers.</li> <li>Working on projects to minimize inventory thereby controlling cost and reducing Muda.</li> <li>Monitoring daily production as per OEE and evaluating and discussing the factors that result in reduced effectiveness.</li> </ul>
2014 - 2015	Automotive Spares and Accessories Pvt. Ltd., Karachi. Injection and Blow Molding Department.
Executive Production Engineer	<ul> <li>Ensuring production activities in the Sheet Metal Department. Preparing log sheets, loss times for Blow Molding Department, Vacuum Forming and Sheet Metal Department.</li> <li>Monitoring and ensuring production as per Daily Production Report. Maintaining record of crush of PP- Gray and PP-Black.</li> <li>Planning and supervising activities in the carpet division. Handing over finished goods and monitoring the variance in production.</li> <li>Ensuring proper and effective utilization of equipment via coordination with maintenance department.</li> <li>Partaking in wastage control and Kaizen activities like OEE, TPM, CPK, Process-Control, Lean Manufacturing, SMED by utilizing Industrial Engineering Techniques.</li> </ul>
2014 - 2014	Popular Fabrics Pvt. Ltd., Karachi.
Project Trainee	<ul> <li>Manufacturing Department</li> <li>The stay at the industry was under the reason of a project titled</li> <li>"ERP system for a manufacturing firm". It involved: <ul> <li>Studying the literature related to ERP, basic workflow, implementation etc.</li> <li>Working in selected ERP environment (OpenERP).</li> <li>Replacing the current legacy system in Popular Fabrics Pvt. Ltd. With top tier ERP solution (OpenERP) by integrating inventory data in OpenERP warehouse management module.</li> <li>Proposing implementation strategy and various models (supply chain, S&amp;OP, demand management, integrity etc.) For successful ERP implementation.</li> </ul> </li> </ul>

# Qualification

2016-2018	MSc. MECHANICAL ENGINEERING MODELLING	
	Budapest University of Technology and Economics Budapest, Hungary	
	CGPA: 4.65/5.0 (Excellent with Highest Honors) Major in Design and Technology: (Product Modelling, Machine Design and Production Technology, CAD Technology, NC Technology, Process Planning, Fatigue and Fracture) Minor in Thermal Engineering: (Combustion Technology, Steam and Gas Turbine, Heat Engine)	
2011-2014	<b>B.E. INDUSTRIAL &amp; MANUFACTURING ENGINEERING</b>	
	NED University of Engineering and Technology	
	Karachi, Pakistan	
	CGPA: 3.634/4.0 (7th out of 149) Supply Chain Management, Project Management, Plant Engineering, Advanced Manufacturing Processes, Production Management., Tool Design, Operations Research, CAD/CAM,	

Quality Control, Applied Thermo fluids, Automation & Robotics.

## **Research and Industrial Projects**

#### **Research Supervisor of following research projects**

- Develop Vacuum Metallizing Process for Plastic Molded items (PANACEA) (2018 in-progress)
- Design & fabricate "car wheel balancing machine" by Arduino Program as coordinator (2018 in-progress).
- Parametric CAD modeling of spiral bevel gear and pinion machined using the face milling and hobbling process (2018 in-progress).

#### Industrial and Academic Projects:

- FEA of Hip Replacement Implant (2018).
- Design and Analysis of spline joint with Finite Element Method (2017).
- Coupling holder design for a foldable bicycle trailer (2017).
- Process planning optimization of die and mold design and manufacture (An Expert System Approach) (2018).
- Productivity Improvement in Sheet Metal Department by VSM Techniques (2015).

# **Research Interests**

- Manufacturing Process Simulations.
- DSS/Expert System Development by AI Techniques.
- Non-Linear Dynamics.
- Optimization of tool design and machining parameters
- Computer-aided design (CAD) and computer-aided manufacturing (CAM)
- Implementation of Industry 4.0

### **Teaching and Trainings**

Teaching following courses:

• Tool Design at undergraduate level.

# **Publications**

- Rehman, HU 2018, 'Process Planning Optimization of Die and Mold Design and Manufacture – An expert system Approach', MSc thesis, Budapest University of Technology and Economics, Budapest Hungary.
- *Rehman*, HU *Maaz*, S *Habib*, S & *Azeem*, W 2014, 'ERP System for a Manufacturing Firm - Implementation Strategy', B.E thesis, NED University of Engineering and Technology, Karachi Pakistan.

### Languages

Language	Proficiency
Urdu	Native
English	Advanced (C1-7.5 band)
German	A1-Level
Hungarian (Magyar)	Beginner

## **Memberships and Affiliations**

- Member of Alumni Volunteer at Tempus Public Foundation
- Alumni member Budapest University of Technology and Economics and Tempus Public Foundation.