

# CURRICULUM VITAE

## Personal Data

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**Fatima Muhammad Saleem**

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📅 Date of birth 06/08/1990 | 🇵🇰 Nationality Pakistani

## Professional Experience

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- 12/2016 – to date **Lecturer at NED University of Engineering and Technology**
- Taught Digital Signal Processing, Signals and Systems, Power Electronics, Basic Electronics, Electronic Devices and Circuits, Programming Language, Digital Electronics, Instrumentation and Control, Engg. Economics & Management & Digital Logic Design
- 06/2016 – 11/2016 **Research Work at Max Planck Institute for Dynamics of Complex Technical Systems (Germany)**
- Research on dynamics of the system, specifically Multiple Steady States of the process
  - Analysis and Comparison of different Reactive Distillation control strategies such as Self Optimizing Control method and Heuristic methods
- 04/2014 – 07/2014 **Scientific Research Assistant for Institute for Automation and Kommunikation, Magdeburg**  
12/2014 – 04/2015
- Design of Device Adapter Interface
  - Communication of PLC client & Server using SCALA Modbus
  - Modelling of the parts of Virtual Power Plant on SimulationX using MODELICA
  - Testing of parts using Python FMI and S7-1200 PLC Modbus communication
- 01/2013 – 06/2013 **Trainee Network Engineer in Rangoonwala Group Of Companies, Karachi (Pakistan)**
- Understanding of Infrastructure and Functionality of Operational units
  - Installing & configuring computer systems & Logging customer queries
  - Diagnosing and solving hardware/software faults
- 12/2011 – 01/2012 **Internee in ELECTRONICS Dept. of Civil Aviation Authority, Karachi (Pakistan)**
- Navigational aids, guidance and Target identification
  - Voice recording system, Radar system and Test equipment of CAA
  - VHF and UHF frequency signals
  - Aeronautical message handling system
  - Responsibilities of control tower, equipment & area control centre
- 12/2010 – 01/2011 **Internee in United Mobile Company, Karachi (Pakistan)**
- Client support and Receiving management
  - Work Assistance at Hand to Hand Lab and Main lab
  - Key responsibility of Quality and Control Department

## Education

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- 10/2013 - 06/2016 **MSc. Electrical Engineering and IT** GPA: **1.3** (Passed with Distinction)  
Majors: Power, Control and Automation **Being 1.0 the highest**  
Otto Von Guericke University Magdeburg, Germany
- 01/2009 - 12/2012 **B.E. Electrical Engineering and Computer Science** GPA: **3.7** (Passed with Distinction)  
Majors: Telecommunication  
NED University of Engineering and Technology Karachi, Pakistan
- 10/2008 - 03/2009 **Diploma in Office Management** GPA: **3.3**  
Skill Development Council Karachi, Pakistan

## Title of Dissertation

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<b>Master Thesis</b>	Selection of Self Optimization Control Structure for a Ternary Reactive Distillation Column with Inert using MATLAB and Simulink
<b>Bachelor Thesis</b>	Design and Analysis of a vector processing, the digital MTI receiver for pulsed radar using MATLAB and ADS which allows to detect the moving as well as stationary targets along with their range, velocity and sense of motion

## Professional Certification

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03/2016	<b>Course on "Introduction to Power Electronics"</b> University of Colorado Boulder
05/2015	<b>Certificate course "Programming for Everybody in Python"</b> Michigan University
07/2011	<b>Certificate course "Android"</b> Company of Designs and Solutions
06/2010	<b>Course on "Microcontroller"</b> Institute of Skill Development Council, Karachi
02/2010	<b>Course on "Lab View"</b> NED University of Engineering and Technology

## Skills

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<b>Personal Skills:</b>	Ability to collaborate with others and have good team building skills Ability to attend to detail and work in a time-conscious and time-effective manner Ability to compile high level incident reports for management and HSE legal obligations Critical thinking/reasoning ability Excellent presentation skills, Travelling and Relocation possible
<b>Software Skills:</b>	Expert skills at using Microsoft Office, Windows OS, Siemens TIA PORTAL, ITI SimulationX, MATLAB, Simulink, Lab View and LTspice Intermediate skills at using SABER SKETCH, CISCO PACKET TRACER, ADS, Multisim
<b>Programming Skills:</b>	C-Language, Assembly Language, Modelica, PLC Programming, JAVA, XML, SCALA and Python
<b>Language Skills:</b>	Urdu (Native Speaker), English (Fluent), German (Intermediate)

## Projects

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- Investigation of main Algorithms & Concepts to achieve Static Reduction of Power Networks and recommendation of their implementation and optimum utilization, Institute of Power Systems (LENA), OVGU
- Modelling and Simulation of High Purity Binary Distillation Column on MATLAB and Simulink, Institute of Automation (IFAT), OVGU
- Supervised as an internal and external at least 25 projects during my 7 years period in NED

## Professional Membership

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- Member of Institute of Electrical & Electronics Engineers, Membership No.: 93693519
- Enlisted as Registered Engineer with Pakistan Engineering Council, Registration No.: TELECOM/4401
- Member of International Association of Engineers, Membership No.: 162742

## Extras

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- International Scholarship holder during Graduate studies at Otto-von-Guericke University, Germany
- Admin of Social media pages for helping students of Pakistan to study in Germany