SARDAR MUHAMMAD USAMA

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CAREER OBJECTIVE

Seeking some challenging position to boost and exhibit the skills acquired during my professional studies and training experiences that utilizes and develops my leadership and social skills to zenith.

ACADEMICS

[2015 - 2018] NUST SCHOOL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE, ISB
M.S Electrical Engineering (Power Electronics & Control Systems)
Course work completed; Thesis in progress   CGPA = 3.25/4.00

[2011 - 2015] UNIVERSITY OF ENGINEERING & TECHNOLOGY, TAXILA
B.Sc Electrical Engineering (Power)   CGPA = 3.54/4.00

[2009 - 2011] PUNJAB COLLEGE OF SCIENCE, FAISALABAD
F.Sc (Pre-Engineering)   Marks = 967/1100   (87.91%)

[2007 - 2009] DIVISIONAL PUBLIC SCHOOL & COLLEGE, FAISALABAD
Matriculation (Science)   Marks = 969/1050   (92.29%)

MAJOR PROJECTS

- **Human Robot Interaction for Two Way Navigational Instructions:** Robots plan their path to the destination using the linguistic and visual clues given to them by human and its reverse case where robot guides the path with a summarized map with distinctive patterns for similar looking places.

- **200kV Cockcroft Walton Multiplier:** Cockcroft Walton Multiplier is used to achieve high voltage levels without depending on transformers. It consists of 2 capacitors and diodes in each stage and multiple stages are made to achieve higher voltage levels.

- **Cyclo-converter:** It changes the frequency of input supply. It consists of two portions of converters. One is positive cycle converter and the other is negative cycle converter. Each converter consists of diodes. It also consists of filter portion to remove the harmonics.

- **Line Following Robot:** It consists of right and left sensors. Each sensor contains LDR and LED. LED emits light and LDR senses reflecting light and gives signal to the motor.

PUBLICATIONS

- Kinza Ali, Muhammad Kamran, Fahim Gohar Awan, Hira Tahir, and Sardar Muhammad Usama. "GEOGRAPHIC BASED MAPPING OF PRIMARY DISTRIBUTION NETWORK USING GPS AND GIS SYSTEM." *Science International* 27, no. 4 (2015).

- Kinza Ali, Muhammad Kamran, Fahim Gohar Awan, Sardar Muhammad Usama, and Hira Tahir. "GPS BASED POWER SYSTEM OPTIMIZATION ON MEDIUM/LOW VOLTAGE FEEDER." *Science International* 27, no. 5 (2015).

TRAININGS & INTERNSHIPS

- ERP, FESCO, Faisalabad   (2017-2018)
- WAPDA Engineering Academy, Faisalabad   (2014)
- FESCO Transformer Reclamation Workshop, Faisalabad   (2014)
- Grid Station Gatti, NTDC, Faisalabad   (2013)

CPD POINT ACTIVITIES

- International Conference on Intelligent Systems Engineering (ICISE) 2016 (IIUI) (Jan, 2016)
- Effective Team Working and Leadership Skills (UET Peshawar, Abbotabad Campus) (May, 2017)
- Introduction to MATLAB Programming (UET Peshawar, Abbotabad Campus) (May, 2017)

WORKSHOPS

- EEG Data Acquisition and Signal Processing (Neuroinformatics Lab NUST SEECS) (Sep, 2016)
- Nonlinear Control Systems (NUST SEECS) (Mar, 2017)

PROFESSIONAL MEMBERSHIPS

- Registered Engineer of PEC (2015 - onwards)
  Membership# ELECT/48724
  Reference: http://www.pec.org.pk/getpecno.aspx

- IEEE Professional Member (2017)
- IEEE Student Member (2013, 2016)
- Member of various groups/communities/councils/societies within IEEE (2013 - onwards)
  Membership# 92585063
  Reference: https://ieee-collabratec.ieee.org/app/p/SardarUsama25557

SKILLS

- MATLAB
- Octave
- Python
- C++
- Proteus
- Multisim
- Circuit Wizard
- ROS (Robot Operating System)
- Latex
- MS-Office (MS-Word, MS-PowerPoint, MS-Excel, MS-Visio)

CO-CURRICULAR ACTIVITIES

- Former Co-head Reporting & Website, IEEE Student Branch, UET Taxila (2014)
- Former Student Member of IEEE Student Branch, UET Taxila (2013 - 2015)
- Former Member of Event Organizing Team of SIEP, UET Taxila (2013)

HOBBIES

- Coding in MATLAB, mainly on *stackoverflow.com* with 13,000+ reputation.
  Reference: http://stackoverflow.com/users/5698672/sardar-usama

- Taking online courses.

  Completed courses with awarded certificates include:
  - ✶ "Introduction to Power Electronics" by Dr. Robert Erickson (University of Colorado Boulder, USA)
    Reference: https://www.coursera.org/account/accomplishments/certificate/3HHGHG95U8DL

  - ✶ "Converter Circuits" by Dr. Robert Erickson (University of Colorado Boulder, USA)
    Reference: https://www.coursera.org/account/accomplishments/certificate/4PUM6RZT56XD

BIO-DATA

- **Father's Name** Muhammad Ali
- **Date of Birth** 25-03-1995
- **Nationality** Pakistani
- **Languages** Urdu, English, Punjabi
- **Blood Group** O+

REFERENCES

Further references will be furnished on demand.