
WORK EXPERIENCE

System Study cum Design Engineer | Lipi

April 2023 - Present

- I have a working Knowledge of PowerFactory in Network Sequence Analysis, Load Flow calculations, Short Circuit Analysis, Harmonics Spectrum and assisted in Insulation coordination Study_EE basics [Standards familiar with [IEEE 399](#), [IEEE 519](#), [IEEE 3002.2](#), [IEEE 3002.3](#) & [IEEE 3002.8](#)] during this time.
- I have worked on DigSilent PowerFactory as Software evolution Engineer for Low Frequency oscillation LFO in Traction Power System.
- I have prepared Cable Derating Factor Excel sheet for LV, HV & EHV. Exposure to cable laying, Grouping of Cable, no of circuit in grouping, ambient condition, soil resistivity, Insulation material like XLPE, Armouring type, No of cores, System Voltage, Bending Radius, Cable Catalogue/Datasheet, current rating & voltage drop at no load.
- I am part of Panto-Catenary R&D project and skills that i have gained and strengthen are CAD to model OHE in Traction Power System and then convert to Structure Element to check it's Feasibility & Reliability using SofiStik Finite Element Analysis FEA software, Data Analysis using Python for instance's Low Pass Filter in Frequency Domain from Time Domain data, Visual Basic Application VBA, Macro, Excel. The Standard's i have refered during this entire project is [EN50318](#), [EN50319](#), [EN50367](#), [BS EN50119](#), [BS EN50149](#), [DIN EN50182](#), [DIN48201_Part2](#).
- I have prepared Protection SLD for Typical Main DSS as a reference [[IEEE C37.2](#), [IS 9921](#), [IEC 61439](#), [IEC 60617](#), [IEEE 80](#) and [HSR Tech Spec](#)] under a senior engineer's guidance.

SKILLS & STRENGTH SUMMARY

- **M/c Language's:** | C++ ; Python_Basic, Power System Studies & Task Automation |
- **Software & Tool's:** | DigSilent PowerFactory; CAD_2D,3D; Excel_Advance Engg, Macros,VBA; PowerPoint & Word ; PVsyst; Cisco Packet Tracer; Aurdino IDE; LTspice; MatLab & Simscape electrical_knowledge |
- **Language Known:** | Hindi ; English ; Rajasthani ; Punjabi |
- **Strength:** | Rapport Building ; Punctuality ; Honesty ; Tech & Software savvy; Quick learner; Vipassana Meditation |

EDUCATION

Rajasthan Technical University, Kota

Rajasthan, India

B.Tech EE_Score: 74% with Honours

August 2016 - Dec 2020

Kendriya Vidyalaya, Churu

Rajasthan, India

Senior School – PCM & CS_Score: 74%

June 2014 - May 2015

EXTRA-CURRICULAR

Participated in the Different Tech Fest in several institutes like BHU, inter college, Deemed University and also organized tech fest at college level, during my Graduation.

Robo Tech Fest:

- Exposure to battery[dry type] & cable sizing, DPDT switch connection mechanism, Bridge Rectifier using four diode, Capacitor to filter out ac signal from DC output for 230 V ac to 12V DC as well their type & rating pick-up and verification using oscilloscope. DC motor speed control from rated speed 1200 rpm by using two cu plates as anode & cathode, medium of solution is normal /Distill water and then by varying electrode relative distance to get desired speed.

Quad-copter Tech Fest:

- Exposure to Fly-sky controller, frame structure & material, control signal, ESC [electronic speed controller] and BLDC motor [3400rpm]. ESC current limit and motor uneven loading causing ESC burn-out. Blades size, Slope, material strength decision.

Automation:

- Exposure to GSM & Aurdino, DTMF module.

Some common skills I have learned include BoQ (Bill of quantity); Documentation and Transfer of Knowledge; Cost Estimation; Team Player; Experience of working without a mentor & learnt lesson from failure; Planning & Cooperation in Labs, Workshop, classroom as well as with management & HOD's; etc.
