Arpit Khandelwal

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EDUCATION

Year	Degree/Certificate	Institute	CPI/%
2021-Present	MTech in Sustainable Energy Engg.	Indian Institute of Technology, Kanpur	8.34/10
2016-2020	B.Tech in Electrical Engg.	National Institute of Technology, Patna	8.04/10
2014-2015	RBSE(XII)	MDS Senior Secondary School	90.0%
2012-2013	RBSE(X)	Adarsh Vidhya Mandir	89.67%

ACADEMIC PROJECT & TERM PAPER

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- **PG Life Web App** (Self Project), (*May 2022- June 2022*)
  Technology-(HTML,CSS,Javascript,PHP,SQL,Bootstrap)
  - Accomplished the development of a PG E-Booking Web Application incorporated with a gallery to showcase the PG Hostel list in different cities.
  - Used PHP and MySql to build relational database to store Users related data.
  - build Responsive website which can be render in different size of device
  - this web app can be used by users to search PG in different cities.
  - Deployment on Github.

- **Portfolio Web App** (Self Project), (*April 2022- May 2022*)
  Technology-(HTML,CSS,Javascript,PHP,SQL,Bootstrap)
  - Accomplished the development of a Personal Portfolio Web Application incorporated to showcase My Projects and Skills.
  - Used PHP and MySql to build relational database to store client related data.
  - build Responsive website which can be render in different size of device.
  - this web app can be used by client who is interested to work with me on software related project.
  - Deployment on Github.

- **Series-Series Wireless power Transfer Circuit**(EE698E:Course Project),Guide:Prof.Suvendu Samanta (*Feb'22 - April'22*)
  - Input voltage=400V dc, Output voltage=400V,Output Power=3300W
  - Design all the tank parameters - derive voltage and current stress of all the tank elements & Simulate in open loop
  - Design closed-loop - simulated with closed-loop at a power of 3.3kW - add a load step of 1kW and show the response.
  - Verify the voltage and current stress of all the tank elements switches, and diodes through PSIM simulink software.

- **Manufacturing & economic Analysis of CdTe Solar Cell** (SEE612A:Course Project), Guide : Prof.K.S.Nalwa (*Fev'22 - April'22*)
  - Basic overview of CdTe Solar cell and Module.
  - Analysis of Different Manufacturing Techniques
  - worked on Techno Economic Analysis based on Review paper.

- **Study of Maximum Power Point Tracking (MPPT) Techniques in Solar Photovoltaic Array.** (BTech Project), Guide : Dr. Sanjeev Kumar Mallik (*June 2019 - June 2020*)
  - Basic overview of Solar cell and Module.
  - Implemented different MPPT Techniques to track Maximum power on solar panel like curve fitting Techniques,perturbs and observe method.
  - Implemented Perturbs and observe algorithm using MATLAB software.
  - Simulation and Mathematical Modelling of Solar PV system using MATLAB.

PROFESSIONAL EXPERIENCE

- **Vikran Engineering & Exim Private Limited** (planning & Execution Engineer) (*Nov 2020 - July 2021*)
  - contribution in 33 kV & 11 kV Feeder Installation and supervised the team member.
  - worked on insatllation of Power distribution Line (LT Line) & 25 KVA distribution Transformer.
  - worked on SLD drawing for Power distribution Network using Autocad software.
- **Power Grid Corporation of India Limited** (Electrical Intern) , (*May 2019 - July 2019*)

- overview of Power Grid (400/220KV) Operation and Transmission Network
- knew about Transformer Oil testing Lab & Power System Protection Equipment , Switchyard Visit.

Research Experience

- **Enabling & Quantify Resiliency in Power distribution system using Graph Theory and Choquet integral** (MTech Thesis) , **Supervisor**: Prof. Prabodh Bajpai (*June 2021 - Present*)
  - Tested on Two Proximal CERT Microgrid to quantify the resiliency value for different Possible Network.
  - Implemented Algorithm for enabling resiliency through PN soultions and their resiliency quantification.

Technical Skills

- **Programming:** C, C++, Python, SQL, PHP, OOPs, Javascript.
- **Web Technologies:** HTML, CSS, React.
- **Software tools/IDE:** MySQL, MATLAB, PSIM ,VS Code editor, Version Control(GIT), Window, Linux, LaTex.
- **Library:**NumPy, Pandas, Matplotlib, Seaborn, Keras, Pytorch, Tensorflow .

Area Of Interest

Power System
Power Electronics
Software development
Data Science

Relevant Courses

Smart Grid Technology & Application
Power System
Power Electronics
Manufacturing of Energy System
Sustainable Energy Technology
Power Converters for EV Charging
Introduction To Machine Learning(Audit*)

Online Courses Certification

- Data Structures Algorithms using C++
- Web Development training at Internshala

Positions of Responsibility

- **Teaching Assistant :** Essential Electrical Engineering For Renewable Integration(SEE616A) (*Aug'21-Present*)
- **DPGC Member :**Coordinated in PG Admission Process for Batch Y22 MTech Student (*Jan'21-July'21*)
- **IEEE Event Organiser :**As a Event Organiser I contributed in Impulse-18 Event to make it successful. (*Aug'18-Dec'18*)

Achievements & Extra-Curricular

- Secured 98.11 percentile in GATE 2021 out of 87559 candidates appeared.
- Secured 98 percentile in JEE MAIN 2016 out of 1.2 million candidates.
- **Hobby:**Playing Badminton,Learn new things.

CAREER OBJECTIVE

To achieve the best possible results by making all efforts with my skills, while being honest and punctual towards my work.