HARSHIT MISHRA

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EDUCATIONAL QUALIFICATION

Year	Degree	Institution/ School	Performance
Present	M.Tech (Electrical Engineering)	Indian Institute of Technology Kanpur, India	8.00/10
2015	PG Diploma	Power System training Institute, Bangalore	83%
2014	B. Tech (Electrical Engineering)	SGSITS, Indore	70.04%
2009	XII(AISSCE)	Joy Senior Secondary School, Jabalpur (CBSE)	78.80%
2007	X(AISSE)	Joy Senior Secondary School, Jabalpur (CBSE)	82.80%

- Secured all India **99.28** percentile score in Graduate Aptitude Test 2017 in subject of Electrical Engineering.
- Got selected in BSNL, JTO through GATE 2017.

PROFESSIONAL EXPERIENCE

Executive Trainee at Adani Power Limited, Mohindergarh, India (February- June 2016)

- Part of maintenance team in HVDC plant carrying 1200MW of Power.

MASTER THESIS (Ongoing) *[Supervisor: Prof. Nishchal K. Verma, IITK, Co Supervisor: Prof. Saikat Chakrabarti]*

Robust Three Phase Distribution System State Estimation using Machine Learning technique for Pseudo Measurement Modelling

Main Goal	• To develop a robust technique for **three phase unbalanced distribution system** state estimation which is robust against noisy distribution system and bad data attacks.
Modeling	• Mathematical Formulation of the three-phase unbalanced distribution system state estimation using **weighted least square approach** and successfully implementing this formulation through code using **MATLAB** programming language.
Future Work	• Formulation of other machine learning technique to detect bad data, improve time skewness and usage of distributed techniques to reduce time taken for robust estimation.

B. TECH PROJECT [*Supervisor: Prof B.M. Sharma]*

- **Study of High Voltage Test as per recommended by Bureau of Indian Standards (BIS).** *[July'13-May'14]*

Main Goal	• To study about the various high voltage insulation used in the power apparatus.
Utility	• To be aware of testing procedures carried out in Industries.
Challenges	• To understand each and every clause and memorize its procedures.

ACADEMIC PROJECTS (IIT Kanpur)

Implementing Parallel Computing for Dynamic ATC Computation through Hybrid Approach (EE-633A) *[Jan'18-April'18]*

- An approach to determine dynamic ATC, utilizing the benefits of a direct method as well as time-domain simulation method, has been developed and further to reduce the computational time parallel computing has been implemented.

Strong Second order cone programming Relaxations for Optimal Power Flow Problem (EE-632A) *[Jan'18-April'18]*

- In this study, Strong second order cone programming relaxations were used in ACOPF (AC Optimal Power flow) problem and computational advantage over Semi-definite programming relaxation were shown for large OPF problem.

Adaptive Type-2 Fuzzy Approach for Filtering Salt and Pepper Noise in Grayscale Images (EE-658A) *[Jan'19-April'19]*

- In this paper, Salt and Pepper noise of grayscale image was removed using type 2 fuzzy set.
- The filter removes noise in two steps, in first step the pixels are categorized as good or bad based on their primary membership function (MF) values in the respective filter window whereas, in the second step, the pixels categorized as bad are denoised.

POSITIONS OF RESPONSIBILITY

- Worked as DPGC coordinator and worked as liaison between faculties and students and help in smooth conduct of interviews.
- Served as Teaching Assistant twice under Prof. Sandeep Anand and Prof. Nandini Gupta for **ESO 203 Lab** course on Introduction to Electrical Engineering and took lab session of about 35 students.
- Served as Teaching Assistant for **Power Systems EE330** and helped in conducting quizzes and assignments.
- Current Account Secretary in Hall X and helping in smooth running of mess accounts of around 500 plus students.

EXTRA-CURRICULARS

Cultural	• **Learned Deutsch** language **level A1** Course at IIT Kanpur.	*[May'19]*
	• Member of Inter-Branch handball winning team at SGSITS, Indore.	*[Sept'12]*
Technical	• Actively Participated in Artificial Intelligence Workshop held at IIT Kanpur.	*[June'18]*
	• Actively Participated in VLSI workshop held at SGSITS Indore.	*[March'2012]*

RELEVANT COURSES

Simulation of modern Power systems, Fundamentals of Electric Drives, Electrical Insulation in power apparatus and systems, Consumer Electronics, Advanced Electric Drives, Economic operation and control of power systems, Electric Power system operation and Management under Restructuring Environment, Fuzzy Set, Logic & Systems and Applications, Sub-Transmission and Distribution.

TECHNICAL SKILLS

MATLAB I C I Python I C++ I LaTex I PSpice I PowerWorld

HOBBIES & LANGUAGES

Table Tennis I Basketball I Cooking I Hindi I English I Deutsch (A1)