Curriculum Vitae

NAME	: ISHA ARORA
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OBJECTIVE: With a good academic record and valuable internships with companies like DMRC, CSIO; I seek a role in a growing organisation that provides generous opportunities for learning. So that I can accomplish personal and organisational roles.

PROFESSIONAL QUALIFICATION:
DOCTOR OF PHILOSOPHY:

Ph.D. candidate in Electrical Engineering Department, Punjab Engineering College, Chandigarh
Submitted PhD Thesis in September, 2021
Thesis title: "Global Solar Irradiance Forecasting Using Machine Learning and to Study the Effect of Tilt Angle, Orientation for Maximizing Solar PV Power Output for Chandigarh"

MASTER OF ENGINEERING (POWER SYSTEMS) POST GRADUATION:

July, 2015 – May, 2016
Thapar University, Patiala, India
Master's Dissertation
Thesis title: "Unit Commitment Scheduling by using Artificial Neural Network based Medium Term Load Forecasting"

SEMESTER	UNIVERSITY	SGPA/10	CGPA/10
FIRST, DECEMBER-2014	THAPAR INSTITUTE OF ENGINEERING AND TECHNOLOGY	8.55	8.55
SECOND, JUNE-2015		9.65	9.08
THIRD, DECEMBER-2015		9.42	9.17
FOURTH, JUNE-2016		10.00	9.33

C.G.P.A.: 9.33

BACHELOR OF ENGINEERING (ELECTRICAL ENGG) GRADUATION:

SEMESTER	UNIVERSITY	SGPA/10	CGPA/10
FIRST, DECEMBER-2010	THAPAR INSTITUTE OF ENGINEERING AND TECHNOLOGY	8.44	8.44
SECOND, MAY-2011		6.66	7.60
THIRD, DECEMBER-2011		8.60	7.95
FOURTH, MAY-2012		7.92	7.95
FIFTH, DECEMBER-2012		8.76	8.12
SIXTH, MAY-2013		8.00	8.10
SEVENTH, DECEMBER-2013		8.42	8.14
EIGTH, MAY-2014		10	8.29

C.G.P.A : 8.29

ACADEMIC QUALIFICATION:

EXAMINATION	SCHOOL	SCORE
AISSE-2008 (CLASS-X)/CBSE	D.A.V. PUBLIC SCHOOL, B.R.S. NAGAR, LUDHIANA	92.8%
AISSCE-2010 (CLASS-XII)/CBSE		93.6%

ACADEMIC ACHIEVEMENTS / SKILLS:

- Institute GATE Scholarship at Punjab Engineering College, Chandigarh awarded by Government of India (2017 - 2021).
- Teaching Assistant at Punjab Engineering College, Chandigarh: 2017 - 2021.
- Fellowship of TEQIP-II MHRD at Thapar University awarded by Government of India as an appreciation for higher studies (2014 - 2016).
- Teaching Assistant at Thapar Institute of Engineering and Technology, Patiala: 2014 - 2016.
- Qualified the GATE (Graduate Aptitude Test for Engineers) conducted by the Ministry of Human Resources and Development, Government of India
- Among TOP 5 students in science in CBSE class XII in district.
- Topper in physics in school in CBSE class XII.
- Among 0.1% nationwide students in CBSE class X.

RESEARCH PUBLICATIONS:

Isha Arora, Jaimala Gambhir, Tarlochan Kaur, "Data Normalisation-Based Solar Irradiance Forecasting Using Artificial Neural Networks", Arabian Journal for Science and Engineering, 46, 1333–1343, 2021.

Tarlochan Kaur, Isha Arora, Jaimala Gambhir, Ravneet Kaur, Ayush Gera, "Experimental Study on Tilt Angle and Orientation of Rooftop PV Modules for Maximising Power Output for Chandigarh, India", Renewable Energy Systems: Modelling, Optimization and Applications (RESMOA 2021), Wiley Book Chapter, 2021.

Isha Arora, Tarlochan Kaur, Jaimala Gambhir, "Variable Selection Technique for Solar Global Irradiance Prediction", Control and Measurement Applications for Smart Grid, Lecture Notes in Electrical Engineering, Springer, 2021.

Isha Arora, Jaimala Gambhir, Tarlochan Kaur, "Monthly Averaged All Sky Solar Irradiance Prediction Using Artificial Neural Networks for Chandigarh region", Advances in System Engineering, Lecture Notes in Mechanical Engineering, Springer, pp. 427-435, DOI 978-981-15-8025-3_42, © 2021.

Isha Arora, Jaimala Gambhir, Tarlochan Kaur, "Decimal Normalisation based Artificial Neural Network Model for Daily Averaged All Sky Solar Irradiance Prediction", International Conference on Integrated Interdisciplinary Innovations in Engineering (ICIIIE 2020).

Isha Arora, Jaimala Gambhir, Tarlochan Kaur, "Solar Irradiance Forecasting using Decision Tree and Ensemble Models", International Conference on Inventive Research in Computing Applications (ICIRCA 2020), IEEE Conference Proceedings, pp. 675-681, Scopus Index.

Isha Arora, Jaimala Gambhir, Tarlochan Kaur, "Impact of Dust Deposition on PV Panels and Cleansing Methods", Journal of Emerging Technologies and Innovative Research, UGC approved journal, 2019.

Isha Arora, Jaimala Gambhir, Tarlochan Kaur, "Soiling Effects on PV panels and cleaning technique", IEEE, ICPEICES – 2018.

Isha Arora, Manbir Kaur, "Unit commitment scheduling by employing artificial neural network based load forecasting", India International Conference on Power Electronics (IICPE), 2016, IEEE Conference Proceedings, pp. 1-6.

Isha Arora, Manbir Kaur, "Weather Sensitive Medium Term Load Forecasting Using Artificial Neural Network", National Conference on Advanced Computational Methods in Electrical Engineering (ACMEE-2016), IJERT.

PROJECTS / TRAINING UNDERTAKEN:

June, 2015 – July, 2015
6 weeks training at <u>CSIO, Chandigarh</u> on study of Energy Management System and its application towards Microgrid.

January, 2014 – June, 2014
6 months training at <u>DELHI METRO RAIL CORPORATION (DMRC), Delhi</u>
Have learnt about the electrical and mechanical system of Delhi Metro.
Have done a study on the lighting system of metro station and made comparison between normal and LED lights.
Worked on software named DIALux evo.
Carried out a calculations based project on Earth Mat Designing.

June, 2012-July, 2012
6 weeks training on the <u>PLC Programming and Industrial Automation</u> from <u>NETMAX, Chandigarh,</u> carried out the simulation of various industrial processes in CodeSys software and learnt about OrCAD software.

EXTRA CURRICULAR ACTIVITIES:
- Participated in various cultural activities during school.
- Executive Member of the publicity team of university's technical fest, Aranya, 2010.
- Executive Member of Technical team (ELECTRICAL) at Aranya , 2010.
- Executive Member of the reception committee of the inter college cultural fest, Saturnalia, 2011.
- Organised various informal events under ISTE and Career Fair**.**
- Attended conference of IET 2012.
- Served as volunteer of Lakshya (Youth United society). Had taught underprivileged students for 1 year.
- Taught dance to underprivileged students for Smiling Future event under Youth United.
- Co-convener of the NSS society of university during session 2012-13.
- Event head of Paper Presentation (technical event) under Aranya, 2012.
- Participated in various cultural activities conducted in hostel.
- Participated in bhangra competition during university's inter year fest Izhaar, 2013.

OTHER INFORMATION:

- IEEE Member
- Was earlier an IET Member.
- Well versed with Microsoft Office.
- Served as Class Representative of Electrical (10-14 batch).
- Tools known – MATLAB, SketchUp, HOMER, LaTex.

LANGUAGES KNOWN: Hindi, English and Punjabi (read, write and speak)