# SOM **ANKAR**

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# **OBJECTIVE**

A committed, knowledgeable, hardworking and capable student who strives to achieve the best. Extensive knowledge and experience in the research domain of power system protection, HVDC transmission system and artificial intelligence application to the power system. Highly experienced in project and team management, strategic planning. A confident presenter and adept learner, able to digest complex information of all levels. A motivated individual who is keen to follow his dream.



## **EDUCATION**

**Doctor of Phillosophy (PhD) | 2020** Specialization: Power electronics

National Institute of Technology, Tiruchirappalli

CGPA: 9.00 HONOURS

Master of technology (M. Tech.) | 2017 – 2019

Specialization: Power System and Control National Institute of Technology, Raipur

CGPA: 8.67 HONOURS

Bachelor of Engineering (B.E.) | 2012-2016

Electrical Engineering (Electronics and Power)

P. R. Patil College of Engineering and Technology, Amravati.

CGPA: 9.00 / 76.48%

DISTINCTION

**Higher Secondary School Examination | 2011-2012** 

Govt. Vidarbha Institute of Science and Humanities, Amravati.

PERCENTAGE: 82% DISTINCTION

Secondary School Examination | 2009-2010

Dnyanmata High School, Amravati.

PERCENTAGE: 82.73%

DISTINCTION



## **EXPERIENCE**

**Research and Teaching | NATIONAL INSTITUTE OF TECHNOLOGY, RAIPUR JUNE 2018-JULY 2019** 

Academic peer reviewer | International Transaction on Electrical Energy System

**Workshops attended** | Soft Computing Techniques, Recent Advances in Renewable Energy and Power System, Five-day short term training programme on "Software tool for power converter design"

PLC and SCADA training | PROLIFIC INSTITUTE OF TECH NOLOGY & PVT. LTD., 12-AUG-2014 TO 19-AUG-2014

One day training at SHIRALA SUBSTATION.

One day training at Ambazari Nagpur Load Dispatch Centre.



# **SKILLS**

- Programming language: C++, C
  Software: MATLAB/Simulink, PSCAD
  /EMTDC, Microsoft Office Visio, KiCad,
  LTspice simulator
- PLC (Allen Bradley, Siemens)
  SCADA (Wonderware Intouch)
- Hands-on experience in MATLAB coding
- Good communication skills
- Project Management
- Paper Writing skills
- Excellent presentation skills

# **ACTIVITIES**



## Research work during PhD

Project Title: Dimensioning and optimization of the hybrid energy storage system and development of control strategy based on drive cycle for Electric Passenger Car

**Research work during Masters (MTech.)** 

Project Title: Artificial Intelligence Based Fault Detection, Classification and Estimation of Fault Location in HVDC Bipolar Transmission Lines

- Conducted research in the field of Bipolar CSC-based HVDC transmission line protection schemes based on different artificial intelligence techniques.
- Proposed novel strategies to obtained high speed in the fault detection and classification of various types of DC line faults with high precision in the estimation of fault location.

### **Published Papers**

- SCI JOURNALS
  - Ankar Som Jairaj, and Anamika Yadav, "A High-Speed Protection Strategy for Bipolar CSC-Based HVDC Transmission System," Electric Power Components and Systems 49, no. 1-2 (2021): 48-66. https://doi.org/10.1080/15325008.2021.1937397
  - Ankar Som J., and Anamika Yadav, "A novel approach to estimate fault location in current source converter—based HVDC transmission line by Gaussian process regression," International Transactions on Electrical Energy Systems 30, no. 2 (2020): e12221. https://doi.org/10.1002/2050-7038.12221
- CONFERENCES
  - S. Ankar and A. Yadav, "ANN-Based Protection Scheme for Bipolar CSC-Based HVDC Transmission Line," 2019 Innovations in Power and Advanced Computing Technologies (i-PACT), 2019, pp. 1-5, doi: 10.1109/i-PACT44901.2019.8960148.
  - S. Ankar, U. sahu and A. Yadav, "Wavelet-ANN Based Fault Location Scheme for Bipolar CSC-Based HVDC Transmission System," 2020 First International Conference on Power, Control and Computing Technologies (ICPC2T), 2020, pp. 85-90, doi: 10.1109/ICPC2T48082.2020.9071450.

#### **Project work during B.E.**

Mini project: Open body permanent magnet dc generator.

The purpose of this project is to make students familiar with the basic concept of Fleming's right hand rule and build the concept in them by showing actual working of permanent magnet dc generator

# Major project: Efficient domestic solar dc submersible pump

- The objective is to provide environmentally sound technology for the provision of remote water pumping system with the help of power electronic device to increase the efficiency of motor.
- The validity of the efficiency of the photovoltaic water pumping system with the use of MPPT has been established by designing and simulating the model in the MATLAB/Simulink.

I, hereby declare that the above information is true and correct to the best of my knowledge and belief.

Som Jairaj Ankar

Date: Aug, 2021