

PERSONAL DETAILS

Name: SAMIKSHA RAWAT

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ACADEMIC QUALIFICATIONS

Year	Degree / Board	Institute	Marks(%)
2019	M.Tech in Power Electronics, Electrical Machines & Drives	Indian Institute of Technology, Delhi	92.5%
2016	B.Tech in Electrical Engineering	GBPUAT, Pantnagar	81.73%
2012	CBSE	KENDRIYA VIDYALAYA	91.6%
2010	ICSE	JYOTI VIDYALAYA	90%

WORK EXPERIENCE

Assistant Manager (07/2019 - 10/2020): Bajaj Auto Ltd, Pune

- Two-wheeler EV testing,
- Control Units testing,
- Developing EV motor controller architecture.
- Worked on e-Chetak Project.

PROJECTS

Wind powered charger for mobile phones (B.Tech Project)

- A novel type of charger was proposed in the project using a renewable source of energy (wind-powered). This was done employing a stepper motor and was tested under different operating conditions. Also, it was implemented using manual power.

Permanent magnet synchronous generator based wind energy conversion system (M.Tech Project)

- Modelling of the system under study
- Comparison between the control strategies for PMSM.
- Implementation of FOC for PMSM drive using Embedded coder.

Development of Electric Vehicle Motors and Controllers for Indian Driving Conditions sponsored by Ministry of Electronics and Information Technology (MeitY)

- Developing efficient motor control algorithms for IPMSM.
- Development of in-house motor controllers.

TECHNICAL SKILLS

- **Languages:** C, C++, dSPIC30F(Assembly language).
- **Softwares:** PSIM, MATLAB, PSPICE, MPLAB, LTSPICE, CCS, ANSYS, Kicad.
- PCB designing.
- CAN communication in vehicles and implementation with vector CANoe.

LIST OF PUBLICATIONS

- S. Rawat and K. R. R, "Electrical Parametric Design of Permanent Magnet Machine for High Power Urban Electric Vehicles," 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC), Brasov, Romania, 2022, pp. 639-647, doi: 10.1109/PEMC51159.2022.9962931.
- P. Jayal, S. Rawat and G. Bhuvaneshwari, "Simplified Sensor Based Vector Control of Permanent Magnet Synchronous Motor Drive," 2020 IEEE International Conference on Power Electronics, Smart Grid and Renewable Energy (PESGRE2020), Cochin, India, 2020, pp. 1-6, doi: 10.1109/PESGRE45664.2020.9070639.

RESEARCH AREAS

- **Power Electronics.**
- **Electric Machines, Control of drives and its application areas.**
- **Electric Vehicles.**