



Nimananda Sharma

Postdoctoral Researcher

I am very independent, analytical, and driven, with experience in technology, product development, and project management. My expertise includes electromagnetic design of electric machines, machine control, and laboratory verification. Additionally, I have worked with 2-level inverter HW development, including requirements, component selection, PCB design, and integration.

Contact

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Gothenburg, Sweden

Design Tools

MATLAB	Proficient
Simulink	Proficient
PLECS	Proficient
SolidWorks	Proficient
KICAD	Competent
ControlDesk	Proficient
Ansys Electronics Desktop	Proficient

Language Skills

English	Fluent
Swedish	Level A2

Interests

Badminton
Table tennis
Board games
Hiking

Teaching

Electric machine design and analysis
Machine control
FEM modeling of machines
Power electronics for power system
Electric machines for vehicles and vessels

Work Experience

Postdoctoral Researcher Oct 2022 – Present

Chalmers University of Technology, Gothenburg, Sweden

- I am working as a researcher and work package leader in an EU project to design, prototype, and test high-power density traction inverters.
- Additionally, I supervise two Ph.D. and one master's thesis students.
- Furthermore, I am working alongside industrial partners to write proposals for externally funded projects.

Graduate Student Researcher Aug 2017 – Sept 2022

Chalmers University of Technology, Gothenburg, Sweden

- I worked on system design, modeling, and verification of distributed drivetrains in an EU project.
- I developed PHIL and MHIL test benches for laboratory verification of distributed drivetrains.
- I implemented machine control using dSPACE HW and performed FEM model verification of a PMSM.
- Additionally, I contributed to more than 10 IEEE technical articles.

Deputy Manager Aug 2011 – July 2015

Mahindra and Mahindra Ltd., Chennai, India

- I defined EMC test plans for electronic sub-assemblies and entire vehicles.
- I performed development and certification tests on component and vehicle levels.
- Additionally, I also worked on identifying and solving EMC-related issues in the field.

Education

Doctor of Philosophy Aug 2017 – Sept 2022

Chalmers University of Technology, Gothenburg, Sweden

Thesis title: Design, Modelling, and Verification of Distributed Electric Drivetrain

Master of Science Sept 2015 – June 2017

Chalmers University of Technology, Gothenburg, Sweden

Received tuition fee waiver via The Avancez Scholarship, CGPA: 4.91/5