



Aakriti Bhandari

Date of birth: 20/11/1999 | **Nationality:** Nepalese | **Phone number:** (+47) 96889470 (Mobile) |

Email address: aakritibhandari765@gmail.com | **LinkedIn:**

<https://www.linkedin.com/in/aakriti-bhandari/> |

Address: Campus Porsgrunn Studentboliger, A-B, B309, 3918, Porsgrunn, Norway (Home)

● EDUCATION AND TRAINING

08/08/2025 – CURRENT Porsgrunn, Norway

MSC IN ELECTRICAL POWER ENGINEERING University of South-Eastern Norway

Website <https://www.usn.no/english/>

01/08/2019 – 31/05/2024 Dhulikhel, Nepal

B.E IN ELECTRICAL AND ELECTRONICS ENGINEERING (POWER AND CONTROL) Kathmandu University

Website www.ku.edu.np

31/08/2023 – 31/05/2024 Hyderabad, India

FINAL YEAR EXCHANGE STUDENT Indian Institute of Technology Hyderabad

Website <https://www.iith.ac.in/>

● SKILLS

Matlab/Simulink | Python | LT Spice | LabVIEW | Microsoft Packages | OpenModelica | Battery Storage System | SCADA Automation | LaTeX | Codesys

● WORK EXPERIENCE

RESEARCHER – ACADEMIA INDUSTRY COOPERATION KATHMANDU UNIVERSITY – 16/08/2024 – 31/07/2025 – DHULIKHEL, NEPAL

- Development of a machine learning model, and an experimental model to sort retired EVs batteries at a modular level for the development of a stationary power storage system.
- Educational upliftment and resource utilization of rural areas of Kavrepalanchowk district of Nepal through "Campus to Community" services.

RESEARCHER – SUSTAINABLE ENVIRONMENT PARTNERS – 12/12/2024 – 12/07/2025 – NEPAL

- Part time researcher at SEP, to design and develop a grid-independent solar power system based on an MPPT charge controller for Algae-Bioreactor.

RESEARCH INTERN – ADVANCED EMBEDDED SYSTEMS & IC DESIGN LABORATORY, INDIAN INSTITUTE OF TECHNOLOGY – 31/08/2023 – 30/05/2024 – HYDERABAD, INDIA

- Product design and development of low-cost customized potentiostat to detect heavy metal ions present in the water.
- Web-application and mobile application development using flutter application, dart.
- Simulation in LT spice, MATLAB for performing the square voltametry technique to detect heavy metal ions.

INTERN – NEPAL ELECTRICITY AUTHORITY – 01/07/2023 – 31/07/2023 – SARLAHI

- Research on Distribution system loss minimization and Grid automation for fault detection.
- Observed and learned the operation of SCADA systems for real-time monitoring and control of electrical substation equipment.

PROJECTS

08/2023 – 04/2024

Low-Cost customized potentiostat

Final year thesis at IIT Hyderabad.

- Developed a MATLAB algorithm, mobile app and prototype of potentiostat that uses Square Wave Voltammetry to detect, quantify, and identify heavy metal ions such as Zn, Pb, As, Cr, etc. in water through signal processing and data analysis.

Link https://drive.google.com/file/d/1Kr1CeLoKsDedkp_7AvfoYwQJfEuLc_E/view?usp=sharing

03/2024 – 06/2024

Poultry Monitoring System

- Developed a system to measure and log parameters such as temperature, tachometer reading, and orientation of poultry crates for monitoring purpose.
- Worked as product development engineer to develop a low cost poultry management system using IoT and google API.

08/2023 – 10/2023

Multimodal Driver Warning System

- Analysis of driver's emotion such as anger, happiness and behavior such as dizziness, fresh using machine learning and artificial intelligence.

Link https://www.researchgate.net/publication/386114489_Integrated_Multimodal_Driver_Warning_System_with_Emotion_and_Behavior_Analysis

06/2022 – 05/2023

IoT Based Single Phase Energy Meter with Integrated Protection for Load

- The energy meter measures voltage and current from the grid, to calculate energy consumption and power factor also it has an LED user interface and remote access using cloud connectivity.
- Fault analysis for over current and over current voltage in the meter making it suitable for smart grids and energy management.

Link https://www.researchgate.net/publication/381648652_IoT_based_Single_Phase_Energy_Meter_with_Integrated_Protection

LANGUAGE SKILLS

Mother tongue(s): **NEPALI**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2
NORWEGIAN	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

PUBLICATIONS

2023

[IoT based Single Phase Energy Meter with Integrated Protection](#)

Link <https://ictceel.khwopaconference.com/uploads/conferencepaper/fullpaper/1022.pdf>

● **MANAGEMENT AND LEADERSHIP SKILLS**

Managing Editor and Advisor | Encipher Magazine

At annual magazine of the Department of Electrical and Electronics Engineering at Kathmandu University.

Link <https://seee.ku.edu.np/encipher/>

Secretary | Society of Electrical and Electronics Engineers (SEEE)

A departmental club of Electrical and Electronics Engineering: management and organization of club.

Link <https://seee.ku.edu.np/>

SDG University Ambassador | G17 UAC Nepal

Promoting awareness, engaging in community, and organizing initiatives to combat hunger and food insecurity: implementing Sustainable Development Goals.

Link <https://www.g17global.org/>

Logistic Volunteer Head and Host | Communication and Information Processing-Nepal (CIPN) Conference

Coordinated event logistics, managed volunteer teams, ensured smooth operations, and hosted conference sessions, engaging with participants and speakers.