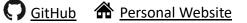
SATISH **ADHIKARI**









+977- 9829504783

An enthusiast and professional youth who believes in positive change and development. Always eager to explore power systems, distributed generation, renewable energies, carbon free grids and power electronics. My motivation and self-initiative drive me to excel in my field making me a valuable asset to project or team.

EDUCATION

Kathmandu University | Bachelor of Electrical and Electronics Engineering

Nepal | **2023**

Cumulative GPA: 3.64/4

Percentage Equivalent: 87.05 %

Major Courses: Electrical Machines, Power System, Power Electronics, Control System and Engineering, Renewable Energy, Measurement and Instrumentation, Industrial Electrification and Control, Smart Grid, Engineering Projects

Prasadi Academy | High Level School (10 +2), Science

Nepal | 2017

Percentage: 79.50 %

Major Subjects: Physics, Mathematics, Chemistry, Biology, English

Padmodaya Public Secondary School | School Leaving Certificate (SLC)

Nepal

Percentage: 80.50 %

On Full Scholarship, House Captain

SKILLS

C/C++, MATLAB, Python **Programming Languages:**

NumPy, Pandas, Matplotlib, Scikit-learn, TensorFlow **Machine Learning Tools:**

Simulations Tools: Simulink, Proteus, Power Factory DIgSILENT, ETAP, KiCAD, PVSyst, DIALux

Others: Adobe Illustrator, Adobe Photoshop, AutoCAD

PUBLICATION

"Microcontroller Driven MPPT System To Enhance Photovoltaic Efficiency: An Experimental Approach In Dhulikhel, Nepal," IOP Conference Series: Material Science And Engineering. **Under Review**

EXPERIENCE

Electrical Engineer | *NEA Engineering Company Ltd.*

Trade Tower - Kathmandu, Nepal

Jan 2024 - May 2024

- 132 kV Underground Transmission Line study and proposal for contract bidding.
- Site visit and details feasibility study reports.
- 400 kV Double Circuit West Seti Corridor transmission line feasibility analysis.
- 132/11 kV Sunakothi GIS Substation study and preparations of general and protection SLD.
- Surveying substations to evaluate reinforcement and upgrades to meet rising demand in Kathmandu Valley.
- Bajura Solar Power Plant potential output power evaluation and analysis using PVSyst.

Associate Electrical Engineer | *NEA Engineering Company Ltd.*

Trade Tower – Kathmandu, Nepal

June 2023 - Dec 2023

- Load flow analysis and designed distribution system for camp facilities of Kimathanka Arun Hydroelectric
 Project.
- Transformers sizing, cable sizing, load modelling.
- 132/11 kV AIS Minbhawan Substation study and preparation of SLD.

COURSES AND CERTIFICATIONS

Machine Learning Specialization

Coursera Andrew Ng

Introduction to Solar Cells

Coursera (DTI)

Technical University of Denmark (DTU

The Resilient and Renewables Grid: How Microgrid are Revolutionizing Energy Systems

Edx University of Alaska – Fairbanks

The Complete LaTeX Bootcamp

Udemy Dr. Paulo Fagandini

X Projects

Design and Fabrication of Respirator

Academic Project

Implemented sensors like air pressure, oxygen level and developed prototype to support breathing mechanism of Covid – 19 patients.

> Skills Learned: Microcontroller, Arduino programming, 3D modelling.

Designing MPPT Controller for Photo-Voltaic Power Generation System

Design Buck – Boost converter, simulate MPPT system in Simulink and develop prototype.

> Skills Learned: Power electronics, converters, MATLAB Simulink

Transmission Line Design

Course Project-Power System I, III year

Power Evaculation study of 200 MW, 160 Km transmission line

> Skilled Learned: Economical Voltage and circuit selection, calculation of insulation discs, Conductor selection, voltage regulation, tension, sag and lattice tower calculations.

Relay Setting of Differential Relays of Generator, Transformer and Busbars of different Substations

Course Project-Switchgear and Protection

Calculating current transformer ratio and relay pickup and stabilizing resistance values for all equipments for radial 4 bus system.

> Skilled Learned: Protection Coordination, relay settings

Substation Earthing Grid Design

Course Project-Switchgear and Protection, IV year

Designed substation earthing grid for 40 MW station using parameters like fault currents, fault clearing time, soil resistivity then calculating conductor size, ensuring resistance <1 ohm, and verifying step and touch potentials.

> Skills Learned: Substation, protection systems, earthing mat design

Fault Analysis for the Power Grid of Bagmati Province, Nepal

Course Project-Power System II, IV year

Modelling grid in Etap, Bus = 20. Analysis voltage and current profile, fault analysis.

> Skills Learned: Grid modelling, Etap for simulations, fault, voltage and current analysis

© EXTRA-CURRICULAR ACTIVITIES

- Participated in educating the students about basic components of electrical systems as organized by Department of Electrical and Electronics Engineering (DOEE), Dhulikhel, Nepal.
- Assisted in reviewing and editing the annual journal of DOEE.
- Volunteering, managing and fund raising for annual event EEPEX (Electrical and Electronics Projects Exhibition) and Robotics Club.
- Participation in Science Exhibition organized by Ministry of Education, Science and Technology in Dang,
 Nepal.



Dr. Shailendra Kumar Jha

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Dr. Kamal Chapagain

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