

Shruti Adhikari

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Panauti-2, Kavrepalanchok, Nepal

OBJECTIVE

GIS Enthusiast with a background in Civil Engineering and expertise in spatial data analysis. Seeking a Master's degree and research assistant position in GIS area to contribute to innovative research and advance spatial data science.

EDUCATION

Bachelor's in Civil Engineering

Purbanchal University • Kathmandu, Nepal

Dec 2017 – Nov 2021

- **Final Year Project:** “Detail Design and Analysis of RCC Arch Bridge”
- **Course Work:** | Hydrology | Hydropower | GIS |

Recipient of the Semester Topper Scholarship for Academic Excellence. (5th, 6th and 7th Semesters)

SKILLS

- **Computer skills:** HEC-RAS, SAP, ArcGIS Pro, AutoCAD, Civil3D
- **Technical:** Hydraulic Analysis, Structural drawings, Estimation and Costing
- **Professional/Social:** Leadership Skills, Effective Communication, Teamwork, Time Management, Decision Making, Problem Solving, Critical Thinking
- **Languages:** Native Language - Nepali, English (C1 Level)

WORK EXPERIENCE

Civil Engineer

Hydro-Consult Engineering Ltd. • Kathmandu, Nepal

Aug 2023 - Present

Feasibility study of Dadagau-Khalanga Bheri Hydropower Project (80.5 MW)

- Collected and analyzed hydrological data for rainfall, river discharge, and watershed characteristics
- Developed hydrological models to simulate river flow conditions.
- Conducted flood risk assessments and designed flood management strategies.
- Performed sediment sampling and analysis to understand sediment load and composition.
- Developed sediment transport models to predict sediment movement and deposition patterns.
- Designed erosion control and sedimentation management strategies.
- Designed hydraulic structures such as dams, spillways, and intake systems.
- Utilized hydraulic modeling tools to optimize structure designs.

Detailed Engineering Design of Rahughat Mangale Hydroelectric Project (37 MW)

- Prepared detailed design reports, including construction drawings for Civil structures
- Ensured designs adhered to standard practices and considered technical, financial, socio-economic, and environmental aspects.
- Supported the client with site-based modifications to address emerging issues

GIS Specialist

Aug 2023 - Present

Freelance Upwork

- Monitored Earth clearing using QGIS and sentinel Imagery.
- Maintained organized records of imagery and analyzed data.
- Collaborated with the team for feedback and suggestions

Civil Engineer

Aug 2022- Jul 2023

Doric Villa Engineering Consultancy Pvt. Ltd. • Kathmandu, Nepal

- Coordinated with clients, head office, and sub-contractors for the execution and management of structural projects.
- Focused on structural analysis and design for RCC commercial and residential buildings.
- Prepared detailed RCC drawings and reinforced concrete structure designs to ensure compliance with safety and durability standards.
- Developed bills of materials, manpower estimates, work schedules, and working drawings for project planning and execution.

AWARDS AND HONOURS

Student Representative Award

Khwopa Engineering College, Bhaktapur, Nepal

PROFESSIONAL MEMBERSHIP AND CERTIFICATES

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|--|----------------|
| • Nepal Engineering Council (NEC) | 2023 – Present |
| • Machine Learning in ArcGIS: Map Land Use Land Cover in GIS | 2020 |
| • Empowering women in geospatial information technology (NASA, ICIMOD) | 2023 |

CONFERENCE PUBLICATION

“Engineering interventions for inclusive Disaster Risk Reduction at heritage sites in Kathmandu Valley” – Addressing Vulnerable Populations. Presented at the **3rd International Conference on Earthquake Engineering and Post Disaster Reconstruction Planning.**

LULC change detection and Prediction using CA-Markov method in Banepa Valley (Ongoing)

References

Subeg M. Bijukcchen

Senior Lecturer, Khwopa Engineering College (Email: subegbij@khec.edu.np)

Rajesh Dulal

GIS Specialist, (Email: georajesh.me@gmail.com)