

Rojina Shahi

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Overview

Seeking an internship in environmental and water resource engineering where I can apply my technical skills and academic knowledge in sustainable water management and environmental protection while contributing to impactful projects.

Skills

Technical: Microsoft Office Suite, LaTeX, ArcGIS Pro, Python, AutoCAD, AERMOD, HEC-RAS

Laboratory: Wastewater and nutrient tests (BOD, COD), Bacteria Culture, Ph-meter, Aerocet-831, Nova PM Sensor

Education

Southern Illinois University Edwardsville

Master of Science in Civil Engineering

Specialization: Environmental and Water Resources Engineering (GPA: 4.00/4.00)

Edwardsville, Illinois

August 2024 – Present

Kathmandu University

Bachelor of Technology in Environmental Engineering

Dhulikhel, Nepal

April 2022

Professional Experience

Process Engineering Service Pvt. Ltd.

Research Assistant

Kathmandu, Nepal

November 2023 – May 2024

- Prepared EIA and IEE reports, utilizing ArcGIS for geospatial analysis and Google Earth Pro for site visualization.
- Conducted field surveys and used HEC-RAS for hydraulic modeling to assess project impacts on local hydrology.
- Facilitated public hearings with presentations created using Microsoft PowerPoint.
- Generated detailed maps and visualizations using ArcGIS.

Renewable and Sustainable Energy Laboratory

Research Assistant

Dhulikhel, Nepal

April 2023 – September 2023

- Designed surveys and analyzed data using Python and ArcGIS.
- Conducted circular economy assessments with energy data modeled in Microsoft Excel.
- Created reports and maps with ArcGIS, focusing on sustainable energy solutions.

Swansgreen Environment Solution Pvt. Ltd.

Research Intern

Kathmandu, Nepal

September 2022 – March 2023

- Conducted GPS-based field surveys, collected elevation data using survey-grade GPS devices, and visualized results in ArcGIS.
- Supported IEE processes by developing geospatial models and layouts.
- Prepared comprehensive environmental assessment reports and presentations with Microsoft Word and PowerPoint.

Sunfarmer Nepal

Operation Intern

Kathmandu, Nepal

May 2022 – August 2022

- Monitored solar-powered irrigation systems and generated performance dashboards using Microsoft Excel.
- Documented and planned renewable energy solutions, utilizing ArcGIS Pro for site analysis.
- Optimized solar panel layouts with engineers, integrating AutoCAD for visualization.

Academic Projects

Assessing Combustion and Fugitive Emissions from Udayapur Cement Factory, Nepal Using Dispersion Model

March 2022

- Simulated particulate matter dispersion (PM₁₀ and PM_{2.5}) using AERMOD, Google Earth Pro, and Python.
- Analyzed results to identify environmental impact zones for mitigation measures.

Anaerobic Digester Research at Guheshwori Wastewater Treatment Plant

April 2018

- Calculated costs and benefits of anaerobic digestion for efficient wastewater treatment.