

SRIJANA SHRESTHA

PhD Student | Department of Geography,
The Ohio State University

1131 Derby Hall, 154 N Oval Mall, Columbus, OH 43210

Shrestha.137@osu.edu | Mobile : +1 614-290-2191

[linkedin.com/in/srishrestha](https://www.linkedin.com/in/srishrestha)

Research interest:

Remote sensing, Agriculture ecosystem, Land use change, Spatial-temporal Fusion.

EDUCATION:

Ph.D. in Geography

Aug 2023 - Present

The Ohio State University, Columbus, Ohio

Advisor: Dr. Desheng Liu

M. Sc. in Climate Change and Development

2022

Tribhuvan University, Kathmandu, Nepal

Thesis: Assessing Impact of Climate Change and Land-Use Cover in Soil Erosion using RUSLE and SWAT model in Kali Gandaki Watershed

Advisor: Dr. Sadikshya Dangi and Dr. Khem Narayan Poudyal

Bachelors in Agricultural Engineering

2018

Tribhuvan University, Kathmandu, Nepal

Thesis: A field study on the use of Mini tiller and its attachment in Barbote & Pyang Gaupalika of Ilam, Nepal

Advisor: Sumana Parui

Diploma in Civil Engineering

2013

Tribhuvan University, Kathmandu, Nepal

PROFESSIONAL EXPERIENCE: ACADEMIC

Graduate Teaching Assistant The Ohio State University Aug 2023 – Present

- Conducted and led lab sessions for undergraduate/graduate students on spatial analysis and remote sensing techniques using ArcGIS Pro and ENVI software.
- Facilitated weekly discussion sections for Climatology, engaging students in discussions and clarifying course concepts.
- Provided personalized academic support and mentorship to students, addressing their questions and academic needs effectively.

- Assisted in grading assignments, quizzes, and exams, ensuring fair and timely assessment of student work.

PROFESSIONAL EXPERIENCE: NON-ACADEMIC

Agricultural Engineer G Seven Agriculture Pvt. Ltd., Nepal 2020 –2023

- Designed and implemented of climate-smart agriculture practices (Micro Irrigation system and control structure farming) optimizing vegetable production.
- Analyzed the water requirements of crops, assess water sources and availability, and design irrigation networks (sprinkler and drip irrigation) to ensure efficient water usage.
- Conducted extensive research and analyzed to identify the problems, explore new technologies and establish best practices in the field of agriculture, contributing to the continuous improvement and innovation.
- Provided technical guidance and collaborate with cross-functional teams, including agronomists, farmers, technicians, and other engineers with expert advice on agricultural engineering principles and troubleshooting.

Agricultural Engineer Unnat Krishi Consultant Pvt. Ltd., Nepal 2019 -2020

- Developed farm layout plans, determining the optimal placement of various components such as fields, irrigation systems, access roads, storage facilities, and other infrastructure to enhance overall agricultural efficiency.
- Assisted in data collection related to agricultural production, infrastructure, and technology for preparing an agricultural strategic plan.
- Evaluated the technical feasibility of the project by identification and planning of infrastructure for preparing detailed project reports.

Assistant Engineer Creative Engineering Consultant Pvt. Ltd., Nepal 2018 – 2019

- Designed residential Building Design and Cost Estimation.

Agricultural Engineer-Intern Kuber and Sons Pvt. Ltd, Nepal 2018

- Solved problems encountered in the types of machinery during operation.
- Assisted in promotion and adaptation of scale-appropriate farm machinery.
- Provided technical support on transferring knowledge on farm mechanization.

PUBLICATION:

Shrestha, S.; Poudyal, K.N.; Bhattarai, N.; Dangi, M.B.; Boland, J.J. An Assessment of the Impact of Land Use and Land Cover Change on the Degradation of Ecosystem Service Values in Kathmandu Valley Using Remote Sensing and GIS. *Sustainability* **2022**, *14*, 15739. <https://doi.org/10.3390/su142315739>

Shrestha, S.; Dangi, S.R., Poudyal, K.N., “Assessing Impact of Climate Change and Land-Use Cover in Soil Erosion using RUSLE and SWAT model in Kaligandaki Watershed” *Proceedings of IOE Graduate Conference (12th)*, **2022**.

CONFERENCE AND WORKSHOP:

Participant, East Lakes Division of the American Association of Geographers, 2023, Oregon, Ohio

Shrestha, S. (Presenter); Dangi, S.R., Poudyal, K.N., Assessing Impact of Climate Change and Land-Use Cover in Soil Erosion using RUSLE and SWAT model in Kaligandaki Watershed, 12th IOE Graduate Conference, 2022, Kathmandu, Nepal

Participant, 7th National Youth Conference on Climate Change (NYCCC), 2020, Kathmandu, Nepal

LEADERSHIP EXPERIENCE

President, Newa Student Association 2017-2018

TRAINING

Neural Networks and Deep Learning, Coursera 2024

Nature-Based Solution for Disaster and Climate Resilience, UNEP & PEDRR 2022

Advanced Training in Agricultural Engineering (ATAE), IIT Kharagpur 2018

RELEVANT SKILLS

GIS Software: ArcGIS, QGIS, ArcGIS Pro, ENVI, ERADAS

Programming Language: Python, R Programming

Others: GeoDa, LaTeX, AutoCAD, SPSS

CERTIFICATION:

Registered Engineer, Nepal Engineering Council 2019- Present

PROFESSIONAL MEMBERSHIP:

Association of American Geographer (AAG)

2023- Present