

SHRADHA SHRESTHA

shradha-shrestha.com | sxs1462@rit.edu | +1 (585) 512-5393

ACADEMICS

- Rochester Institute of Technology**, Rochester, New York 2017 - 2020
M.S. in Environmental Science (GPA: 3.68 out of 4.0)
Relevant Courses: Spatial Algorithm and Problem Solving, Regression Analysis, Hydrologic Application of GIS.
- School of Environmental Science and Management (SchEMS), Pokhara University**, Kathmandu, Nepal 2010 - 2014
B.S. in Environment Management (GPA: 3.8 out of 4.0)
Thesis: Assessment of Bagmati river encroachment through the application of GIS and Remote Sensing.
Honor award: Dean's list of excellence award.

TECHNICAL SKILLS

- Geospatial: ArcGIS Desktop /Pro/Online, Model-builder, Web AppBuilder for ArcGIS, Story map and QGIS.
- Advanced GIS for hydrology: ArcSWAT, LTHIA, RUSLE, Hotspot analysis, Bathymetry.
- Programming Languages: Python (Numpy, Pandas, ArcPy), JavaScript.
- Data Visualization: Graph, Tableau.
- Databases & Query Languages: SQL.
- Other: Minitab, SAS, SPSS, Cartography.

HONORS & AWARDS

- Best Data Visualization Award, BrickHacks6 [\[link\]](#) 2020
- Best Data Mining to help the Community (honorary mention), BrickHacks6 [\[link\]](#) 2020
- Energy Conference Scholarship, EnergyPath at DeSales University 2019
- Best Newbie Hacker, Women in Computing Hackathon (WiCHacks 2018) [\[link\]](#). 2018
- RIT Merit Scholarship (75%) 2017
- Netherlands Fellowship Program (NFP) for MSc. in Geo-information Science & Earth Observation at ITC University of Twente (*declined*) 2017
- Full Merit Scholarship, SchEMS College, Pokhara University 2010

PROFESSIONAL EXPERIENCE

- Research Assistant**, Rochester Institute of Technology, Aquatic Ecology Lab Aug 2017- Present
Advisor: Dr. Christy Tyler
Spatial data analysis of INFEWS Project (*NSF funded*)
- Assessing the ecological impact of food waste digestate storage and disposal on greenhouse gas emissions and water quality using ArcSWAT (hydrological modeling).
 - Land Suitability Analysis (GIS-based site-selection model with model-builder and ArcPy).
 - Published peer-reviewed research articles [\[link\]](#). *Some submissions are in preparation.*
- Vanguard Cabinet**, a URISA's initiative, an advisory board of passionate, young geospatial professionals. 2020 - 2023
- GIS and Data Intern**, FracTracker Alliance Jan 2019 - July 2019
Studying groundwater contamination and air pollution due to hydraulic fracking in California and Colorado using geospatial modeling.
- Determining the current status of groundwater contamination in Colorado state based on literature review and hotspot analysis; a statistically significant GIS-based method.
- Knowledge Management Monitoring and Evaluation Officer**, Group of Helping Hands (SAHAS Nepal) 2014 - 2017
- Data analysis and field monitoring
 - Mapping and geospatial analysis