# **Pradip Shrestha**

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## **TECHNICAL SKILLS**

- Software: ESRI ArcGIS (Desktop/Pro), Erdas Imagine, QGIS, Statistical Package for Social Science (SPSS), NetLogo, InVEST, HEC-HMS
- Versed in R, Python, Google Earth Engine, Matlab
- Survey methods, Participatory rural appraisal (PRA), Qualtrics

## PROFESSIONAL/RESEARCH EXPERIENCE

FELLOW: Graham Sustainability Institute

(05/2022 - 08/2022)

- Extracted impervious surface and class using machine learning algorithms per land parcel
- Administered land use classification using image segmentation techniques on high-resolution orthoimaginery
- Performed data queries, and geospatial analysis to compile data required to run the model
- Developed geo database, prepared final map layout, and procedural manual as a guide to replicate the process

## Master's Project: CIGLAR, School for Environment & Sustainability

(05/2021 - 04/2022)

- Assisted team in research for evaluating the impact of climate change on various ecosystem services across the Great Lakes region using fuzzy cognitive mapping and mental modal
- Administered survey using Qualtrics to targeted stakeholders and developed maps to assess causality among ecosystem services to physical, chemical, and ecosystem determinants

### Climate Change Officer: Resource Identification and Management Society, Nepal

(08/2015 - 07/2016)

- Facilitated preparation of six Local Adaptation Plans of Action (LAPA) to aid in sectoral climate change adaptation planning at the community level with stakeholder engagement
- Performed vulnerability analysis, resource mapping, and risk assessments using a participatory approach
- Prepared maps to highlight the program achievements, outcomes, and spatial extent, and supported the team in publication drafts and central database development.

#### **Environmental Consultant:** Practical Action, Nepal

(04/2015 - 07/2015)

- Developed annotated bibliography on climate change within the sectoral programs of Practical Action; published technical briefs and a toolkit for mainstreaming climate change into the agriculture sector leveraging methodologies for situation analysis, vulnerability, and adaptation assessment.
- Conducted a pre-feasibility for developing an integrated watershed management project using geospatial tools and stakeholder engagements for conceptualizing climate change adaptation needs and challenges

#### **Research Assistant:** South Asia Institute (SAI), Heidelberg University

(04/2013 - 04/2015)

 Supported team in the execution of research on risk assessment, vulnerability mapping, and post-earthquake shelter condition mapping

#### **EDUCATION**

Master of Science: Environment and Sustainability (Expected: 2023\*) University of Michigan (Ann Arbor, MI)

- Concentrations: Geospatial Data Sciences
- Awards: Academic Mertit Fellowship, Catalyst Leadership Circle Fellowship

Master of Science: Environmental Science (2015) Tribhuvan University (Kathmandu, Nepal)

Bachelor of Science: Environmental Science (2008) Tribhuvan University (Kathmandu, Nepal)