

# Arun Kumar Bhomi

## Geomatics Engineer

arunbhomi12345@gmail.com — 9869078149 — arun-bhomi

## EDUCATION

---

**Kathmandu University** Dhulikhel, Nepal  
**Bachelor in Geomatics Engineering (BE)** 2019–2024

– CGPA: 3.86/4.00

**St. Xavier's College** Maitighar, Nepal  
**School Leaving Certificate (SLC)** 2017–2019

– CGPA: 3.48/4.00

**Bagiswori Higher Secondary School** Bhaktapur, Nepal  
**Secondary Education Examination (SEE)** 2017

– CGPA: 3.75/4.00

## WORK EXPERIENCE

---

**Senior Surveyor** Jan 2025 - Current  
**Kathmandu Metropolitan City** Kamaladi, Kathmandu

- Working in “Road Naming and Mapping Project” under Kathmandu Metropolitan City.
- Research in “Household Survey and Data Collection”.

**Data Associate/Geomatics Engineer** Aug 2024 - Jan 2025  
**Genesis Consultancy Pvt Ltd.** Lalitpur, Kathmandu

- Worked in WASH (Water Sanitation and Hygiene) Project that includes the Spatial and Non-spatial Data Analysis.
- Worked in WebGIS Development Project and Spatial Database Management (PHP and SQL)

**Geospatial Data Analyst Intern** March-May 2024  
**Kathmandu Living Labs (KLL)** Chundevi, Kathmandu

- Worked on Cartography Section. Designed Dark Map Style for “Baato”.
- UAV Survey to build 3D Model of Kathmandu University Area.
- GIS Analysis to estimate the height of buildings.

## EXPERIENCE

---

### **2024 International GeoInformatics Summer School (IGSS)**

June, 2024

#### **Participant (Selected)**

Wuhan University, China

- Awarded with Scholarship of 8000 CNY.
- Participated in IGSS-24 organized by LIESMARS (State Key Lab of Information Engineering in Surveying, Mapping and Remote Sensing), Wuhan University.

### **CLImbing for CLImate GEOspatial School (CLIGEOS-2024).**

April, 2024

#### **Participant (Selected)**

Annapurna-3, Lumle, Nepal

- Participated in CLIGEOS-24 organized by ISPRS, LJ University, Universita Degli Studi Di Udine and CSSGS.

### **Workshop and Mapathon on Map Roads: Make your Way.**

Nov, 2023

#### **Instructor (Trainer)**

Dhulikhel, Nepal

- Trained around 50 people about basic OSM.

### **Survey Camp under NCP Student Exchange Program.**

Nov, 2023

#### **Participant (Selected)**

Dhulikhel, Nepal

- 7 Day Survey Camp with Australian Student of University of Southern Queensland.

### **Workshop of Advanced Training of OSM “Training of Trainee”.**

June, 2022

#### **Participant (Selected)**

Dhulikhel, Nepal

- 2 Days Residential Workshop on Training of OSM.

## LEADERSHIP EXPERIENCE

---

### **Geomatics Engineering Society (GES).**

2022-23

#### **[Executive Member]**

Dhulikhel, Nepal

### **Rotaract Club of Rudramati-Babarmahal, Kathmandu.**

2021-22

#### **[Treasurer]**

Baneshwor, Kathmandu

### **St. Xavier’s Social Service Club.**

2018-19

#### **[Treasurer]**

Maitighar, Kathmandu

## PUBLICATIONS

---

- **Assessing Coral Reef Changes through Supervised Classification and correlating it with SST and Chlorophyll-A: A Remote Sensing Approach.**

May 2024

- Carried out project in Google Earth Engine. Used Supervised Image Classification and compared three machine learning algorithm: Random Forest (RF), Classification and Regression Task (CART) and Support Vector Machine (SVM). Developed the prediction model of Sea Surface Temperature using ARIMA Model.

- Paper Published in 9th FIG (International Federation of Surveyors) Regional Conference 2024 (Nov, 2024).  
ISBN 978-87-93914-18-6. ISSN : 2308-3433. [Link to Paper](#)

- **Assessing the Impact of Urban Expansion on Forest Cover using LULC Maps, NDVI, and NDBI: A Case Study of Kathmandu District.** Nov 2023
  - Classified the LANDSAT-8 Images using Supervised Image Classification. Calculated Users, Producers, Overall Accuracy and Kappa Coefficient. Finally, Interpreted all the resulted data and prepared the time-series analysis and map.
  - Paper Published in an annual journal of Survey Department, JOURNAL ON GEOINFORMATIS, Number:23 (May/June, 2024). ISSN : 2717 - 5022. [Link to Paper](#)
- **UAV Images for Agriculture Land Parcel Delineation through Edge Detection Algorithm: A Case Study of Hilly and Terai Regions.** Dec 2022
  - Utilized GIS Methodologies in-built algorithm: Edge Detection Algorithm to compare the parcel delineation between Hilly and Terai Regions.
  - Paper Published in an annual journal of Survey Department, JOURNAL ON GEOINFORMATIS, Number:22 (May/June, 2023). ISSN : 2717 - 5022. [Link to Paper](#)

## PROJECTS

---

- **Suitability Analysis for the appropriate Dumpsite on Bhaktapur District using MCDA analysis in GIS.** May 2022
  - Applied Multi-Criteria Decision Analysis (MCDA) in GIS Software followed by Analytic Hierarchy Process (AHP) Method for locating the suitable place considering different factors.

## AWARDS AND ACHIEVEMENTS

---

- Scholarship Awarded for Participating in 2024-International GeoInformatics Summer School organized by LIESMARS Wuhan University, China. June, 2024
- 35% Government(LMTC) Scholarship in Undergraduate Program. 2019-Current
- Winner: Quiz Competition held at CLIGEOS 2024 organized by ISPRS. April, 2024
- Survey Camp under NCP Student Exchange Program, University of Southern Queensland. Nov, 2023
- Most Creative Idea in the Hackathon for Field Mapping Task-Splitting Algorithm. May 2023
  - Hackathon for Field Mapping Task-Splitting Algorithm organized by NAXA, KLL, NGES, HOT, Open Mapping AP-HUB.
- Academic Merit Scholarship, Kathmandu University. 2022
- International Geoinformatics Summer School, Wuhan University. Aug, 2022
- 2 Days workshop of Advanced Training of OSM “Training of Trainee”. June, 2022
- Open Street Map and Humanitarian mapping by United Nations Global Centre. April, 2022
- Webinar envisioning spatial analysis through SuperMap: A new era of Geospatial Science May, 2021
- Best Student Award with Fr. Charles A. Law Certificate, St. Xavier’s College. March, 2019

- The Fr. Charles A. Law, S.J. Memorial Award for Excellence in Social and Environmental Responsibility.

## SKILLS

---

- **Surveying:** GIS, Remote Sensing, Aerial Survey, DGPS Survey, QGIS, Spatial Database Management System (SDBMS), Web-GIS
- **Programming:** Python, JAVA, PHP
- **Typesetting:** Latex

## LANGUAGES

---

- **English:** Fluent
- **Nepali:** Native
- **Newari:** Fluent
- **Hindi:** Conversational