Yash Katwal

425-563-4519 | yashrkatwal@gmail.com | linkedin.com/in/yash-katwal | yaaash.com

EDUCATION

University of Washington

Seattle, WA

B.A. in Geography: GIS & Data Science | B.S. in Informatics: Software Development

Sep 2019 - Jun 2023

Experience

Software Engineer Intern

Jan 2025 – Jun 2025

Apple

Seattle, WA

- Developed Python automation scripts and leveraged internal AI APIs to automate log analysis and data processing for Apple Vision Pro.
- Created interactive dashboards (HTML/CSS/JS) to visualize bug trends and system performance, enabling faster debugging and improved app stability.

Software Development Intern - GIS Specialist

Oct 2020 - Jun 2023

University of Washington MELC

Seattle, WA

- Deployed an interactive web map with Mapbox GL JS and GeoJSON for public access to historical datasets with WCAG compliance.
- Georeferenced scanned historical maps in QGIS and built a MongoDB GeoJSON layered backend.

Data Science Intern – Spatial Analyst

Jan 2021 – Jun 2022

University of Washington Biology Dept.

Seattle, WA

- Analyzed GPS collar data in QGIS and Python to map wild dog behaviors and movement patterns.
- Trained machine learning models (SciKit, TensorFlow, PyTorch) to classify lion roars, automating data cleaning and preprocessing workflows.

Full Stack Developer - GIS Web Tools

 ${\rm Jan}\ 2023-{\rm Mar}\ 2023$

Adios COVID & UW iSchool

Seattle, WA

- Built a full-stack web app using Next.js and AWS Lambda, integrating Mapbox to display COVID data.
- Created dynamic endpoints and published interactive dashboards to support research use cases.

Cultural Project Manager

Jun 2021 – Jun 2023

South Asian Student Association

Seattle, WA

- Led coordination of large-scale community events, managing budgets, teams, timelines, and external partnerships.
- Created marketing campaigns and communication pipelines, ensuring cross-org collaboration and outreach.

IT Help Desk Assistant

Jan 2022 – Jun 2023

 $UW\ A cademic\ Technologies$

Seattle, WA

- Provided Tier 2 support for students and faculty, diagnosing hardware/software issues across lab and personal systems.
- Researched and documented solutions to technical issues with industry standard applications.

Projects & Activities

Image Classification and NDVI Analysis

Jan 2023 - Mar 2023

UW Geography

Seattle, WA

- Used ArcGIS Pro to classify Landsat 8 imagery and calculate NDVI values for vegetation analysis.
- Created geodatabases and applied supervised/unsupervised classification workflows for disaster impact evaluation.

Web GIS Development Projects

Jan 2023 - Mar 2023

 $UW\ Geography$

Seattle, WA

- Designed and published interactive GIS maps using Mapbox GL JS and GeoJSON datasets.
- Managed collaborative GitHub repositories and structured code/documentation for maintainability.

US Internal Migration Analysis with R + GIS

 ${\rm Jan}\ 2023$ - ${\rm Mar}\ 2023$

Seattle, WA

UW Geography
Analyzed and visualized ACS/IRS migration data using R and Leaflet to show regional migration efficiency.

- Performed data cleaning, merging, and statistical summaries to support insights on demographic movement.

TECHNICAL SKILLS

GIS Platforms: ArcGIS Pro, ArcGIS Online, ArcGIS Enterprise, QGIS, Mapbox GL JS, Leaflet

Languages & Scripting: Python (ArcPy, GeoPandas), R, SQL, JavaScript, HTML/CSS

Geospatial Tools & Analysis: NDVI, image classification, GPS/GNSS data integration, raster/vector QA/QC, GeoJSON, REST APIs

Software & Tools: ESRI Suite, AWS Lambda, Git, Docker, MS Office Suite, Adobe Creative Cloud, Visual Studio Code

Field Equipment: GPS data loggers, survey tools, mobile field collection apps (Field Maps, Survey123)