PRANIK KOIRALA

Transportation Analyst
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EXPERIENCE

TRAFFIC ENGINEER (EIT), CONSOR Engineers, LLC (July 2023 – Present)

- Involved in PS&E development for City of Austin's intersection improvement project.
- Assisted in the automation of traffic re-routing within a build-scenario through Vissim-COM programming.
- Participated in IAJR analysis of a 15-mile IH30 corridor, encompassing safety analysis (ISATe, IHSDM) and traffic analysis (VISSIM, Synchro, HCS).

GRADUATE STUDENT RESEARCHER, Texas A&M Transportation Institute (TTI) (Apr 2022 – May 2023)

Interned during the summer of 2022 and spring of 2023, conducting research funded by US DOT and TxDOT.

- Engaged on a project to create data-driven tools for the TxDoT, focusing on Shared Use Path design.
- I developed a machine learning-based causality analysis method for e-scooter safety also utilized crowd-sourced Strava data to gain insights into bicycle demand in Austin.

GRADUATE STUDENT RESEARCHER, Urban Resilience.Ai Lab, TAMU (Jan 2022 - Apr 2022)

- Worked with millions of data (Mapbox) related to human activity to analyze recovery of community after major storm with interdisciplinary team members on a published study titled: 'Energy Inequality in Climate Hazards: Empirical Evidence of Social and Spatial Disparities in Managed and Hazard-Induced Power Outages'. (Journal: Sustainable Cities and Society)

GRADUATE ASSISTANT, Department of Civil and Environmental Engineering, TAMU (Sep 2021 - Dec 2021)

Assisted Dr. Gene Hawkins in two of his transportation classes:

- CVEN 309 Transportation Engineering.
- CVEN 457/696 Urban Traffic Facilities.

TRANSPORTATION ENGINEER, Realpath Engineering Consultancy Pvt. Ltd. (Jan 2021 - Aug 2021)

- Forecasted demand for Gautam Buddha International Airport, Nepal using multivariate regression models.
- Conducted feasibility study and detailed project reports of regional and international airport (Gautam Buddha International Airport) using geographic data collected by drone, survey data, census data and design standards.

TRANSPORTATION ENGINEER (Intern), IFID Nepal Pvt. Ltd. (Nov 2019 - Oct 2020)

- Conducted field survey, analyzed field data, prepared project report for different transportation infrastructure related projects.

EDUCATION

MS IN CIVIL ENGINEERING (Transportation), Texas A&M University, ***College Station, TX, USA*** (May 2023)

- Classes: Statistical Foundation in Data Science, Machine Learning, Geographic Information Systems, Engineering and Planning Urban Transportation, Highway Safety Traffic Engineering Characteristics, Traffic Engineering Operations, Highway Design.
- Awarded with Zachry Department of Civil & Environmental Engineering Excellence Fellowship

BACHELORS IN CIVIL ENGINEERING, Tribhuvan University, ***NEPAL*** (Nov 2019)

- Relevant classes: Transportation Planning and Engineering, Traffic and Transportation Modeling, Transportation Engineering, Probability and Statistics, Computer Programming.

SKILLS

- Traffic: HCS, Synchro, VISSIM
- Safety: IHSDM, ISATe
- CAD: Microstation
- Microsoft Office
- Excel with VBA
- PowerBI
- ArcGIS Pro, ArcMap
- Python, SQL
- GIS with Python: Geopandas, OSMnx, NetworkX, Shapely

ACTIVITIES

- Volunteered as peer reviewer for TRB annual meeting 2022 & 2023 Artificial Intelligence and Advanced Computing Applications Committee.
- Participated in TAMU Datathon 2021 and TAMU Hackathon 2021.
- Participated in ITE meetings (2021 meeting Dallas, 2022 Spring Corpus Christi and 2022 Fall Danton).

LEADERSHIP

- Vice-President, TAMU - Institute of Transportation Engineers (ITE), ***COLLEGE STATION, TX*** (2022-2023)
- Member, Habitat for Humanity, ***COLLEGE STATION, TX*** (2021 - 2022)
- Co-founder and Vice-President, Leo Club of Kathmandu Global Eye, ***KATHMANDU, NEPAL*** (2020 - 2021)
- Executive Member, Himalayan Civil Club, ***LALITPUR, NEPAL*** (2015 - 2019)
- President, Little Angels' Voluntary Club, ***LALITPUR, NEPAL*** (2014 -2015)