Curriculum Vitae/Resume

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Education

PhD Candidate in Urban and Regional Planning	GPA: 3.9/4.0	August 2020 - Present

University of Michigan, Ann Arbor, Michigan

Masters in Urban Planning and Policy, Urban Transportation	GPA: 3.9/4.0	August 2017

Public Transit Planning and Management Certificate (PTPM)
University of Illinois at Chicago, Chicago, Illinois

Bachelor of Planning, Urban and Regional	GPA: 3.5/4.0	July 2014

School of Planning and Architecture (SPA), Vijayawada, India

Journal Articles (under review)

- Ukil, Shubhayan and Zellner, Moira. "An Agent Based Understanding of Reducing Peak Period Traffic Congestion through Peak Hour Traffic Spread". Submitted to Transportation Research Record.

Conference Presentations

- Ukil, Shubhayan and Misra, Aditi. "Understanding Post-COVID-19 Changes in Grocery Shopping Trip Patterns: A Latent-Class Approach ". Presented at the 102nd Annual Meeting of the Transportation Research Board, January 8-11, 2023, Washington, D.C.
- Verma, Ashish and Ukil, Shubhayan "Estimation of Trip Generation Rates for Different Land Uses for an Indian City" to be presented at the 5th Conference of the Transportation Research Group of India, December 18 - 21, 2019, Bhopal.
- Ukil, Shubhayan and Kawamura, Kazuya. "Impact of Vehicle Registration Fee on Vehicle Ownership," Presented at the 98th Annual Meeting of the Transportation Research Board, January 13-17, 2019, Washington, D.C.

Work Experience

Graduate Student Researcher/ Instructor – University of Michigan	January 2021- Present

- Researched aspects of perceived accessibility, critiquing the existing literature.
- Assisted in teaching Introduction to GIS course, taking labs on using the tool for analysis.
- Assisted in teaching the Planning Methods course, and took a lecture on Transportation Methods.
- Assisting in a capstone project on 'Equitable Access to Parks' in South-East Michigan.

Research Assistant–University of Michigan Transportation Research Institute	May 2022- August 2022

- Working on a project by the Michigan Department of Transportation comparing crowdsourced pedestrian count data with actual counts to understand the effectiveness of using crowdsourced data for demand modeling.

Transport Analyst – World Resource Institute, India	September 2019 – November 2020

- Analyzed the impact of shared mobility on the traffic system in India from a consumer perspective
- Analyzed the impact of last-mile connectivity pilot projects as part of the Station Accessibility and Mobility program
- Developed a GIS-based tool to analyze safety around the schools for children in Bangalore
- Worked on the operation plan for Bus Priority Lane in Bangalore
- Developed analytical tools to calculate bus trips competing with metro line

Guest Lecturer – School of Planning and Architecture, Bhopal	March 2020

- Lectured on Transportation Modeling and Research Design

Junior Research Fellow – Indian Institute of Science, Bangalore	September 2018 - July 2019

- Consulted for a real estate group in traffic impact analysis for their proposed mixed-use development in Bangalore and prepared the traffic management plan
- Developed Standard Trip Generation Rates for different land use types

Transportation Modeler/Analyst – SRF Consulting Group, Minneapolis, MN   January - August 2018
- Developed a tool to estimate the park-and-ride facility demand for the Twin Cities Metropolitan Area, using statistical models for forecasting
- Performed traffic forecasting for cities, counties, metropolitan organizations as part of Comprehensive Plans using land use-transportation models (Activity-Based Model, 4-step Model)
- Worked on comparing the assignment of Activity-Based and Dynamic Traffic Assignment Model
- Consulted for cities to calculate the impact of route closures, lane reduction on traffic movement
- Worked on Duluth freight model calibration using big data (Streetlight Origin-Destination data)
- Perform analysis for rush line Bus Rapid Transit project in Twin Cities, Minnesota area
- Develop codes for analysis of big data on Python

Transportation Planning Intern – DAMA Consultants, Chicago, IL   September - December 2017
- Updated the study area links with volume counts and mode split to set up the network for modeling for the IL53 extension environment impact assessment project

Research Assistant - UIC Neighborhoods + Health Research Group, UIC   September - December 2017
- Analyzed the impact of accessibility to facilities on the health of veterans through geoprocessing analysis
- Performed geoprocessing analysis to compare methods (Kernel Density, Convex Hull) to measure activity spaces of people

Research Assistant– Great Cities Institute, Chicago, IL   August 2016 - July 2017
- Analyzed youth unemployment in Chicago and Cook County across sociodemographic and economic attributes
- Worked on identifying the underlying causes of crime in Peoria, IL through predictive statistical models
- Performed social cost-benefit analysis to analyze the impact of a proposed school in a neighborhood

GIS Research Assistant – Center on Health Promotion, UIC   February 2016 - July 2017
- Study with the Rehabilitation Institute of Chicago to analyze community participation and travel patterns among persons with amputations using GPS data recorders.
- Wrote Python scripts to fully automate the geoprocessing ArcGIS models.

Transportation Analyst Intern – CDM Smith, Lisle, IL   May - August 2016
- Assisted in analysis for forecasting traffic on toll roads and the revenue generation
- Assisted in modeling future traffic scenarios and data analysis for a Highway Interchange study
- Performed analysis for analyzing peak hour spreading, and toll-free movements on IL Tollway.
- Prepared socioeconomic maps for Mobile and Baldwin County, Alabama

Fellowships/Awards
- Patricia F. Waller Scholarship ($5000) – Awarded by the University of Michigan Transportation Research Institute
- Rackham Travel Grant ($900)
- Academic Fellowship – University of Michigan (August- December 2020, January - April - 2022)
- ULI – Trkla Scholarship (2016 - 17) – Academic Scholarship given by Urban Land Institute to work on aspects of economic development.
- James J. Stukel Student Fellowship (2016-17)
- Awarded merit certificate for securing the first position in the Second year (2011-2012)
- Awarded merit certificate for securing the third position in the Third year (2012-13)

Reports

As a Research Fellow at IISc, Bangalore

- Verma. A., Ukil. S (2019). "Traffic and Transportation Management Study for Karle Town Centre", Consultancy Report, IISc Bangalore, India
- Verma A., Khan M., Ukil S., AR H., (2019). "Road Safety Audit of Pandit Deendayal Upadhaya Flyover", Consultancy Report, IISc Bangalore, India

As a Research Assistant at Great Cities Institute

- TL Córdova, MD Wilson (2017) Abandoned in their neighborhoods: Youth joblessness amidst the flight of industry and opportunity-
- TL Córdova, MD Wilson (2017) The High Costs for Out of School and Jobless Youth in Chicago and Cook County

Academic Thesis

- Master's Thesis: Modeling the Impact of Vehicle Registration Fee on Travel Behavior
  - Developed predictive statistical models to analyze the impact of the vehicle registration fees on vehicle ownership and vehicle miles traveled and its impact on policies related to transport funding
- Undergraduate Thesis: Framework to analyze Livability at the Neighborhood Level
  - Identified parameters to analyze livability at the neighborhood level with respect to their proximity to infrastructure facilities and developed a framework to calculate livability in the form of an index

Technical Skills

Data Analysis and Modeling - Python, R, SPSS, LIMDEP, Netlogo, Cube Voyager, VB, SQL, Mplus
Arc GIS 10.3 - extensions– Network Analyst, Spatial Analyst, Spatial Statistics
Data Visualization - Tableau, Altair
Microsoft Office - Microsoft Word, Excel, PowerPoint, Access - 2016
Design and Technical Drawing - AutoCAD 16, Adobe Photoshop, Sketchup