

Aparimit Kasliwal

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EDUCATION

May, 2024 - Present	PhD (Systems Engineering) UC Berkeley, CA Research Focus: Network Science, Mobility Modeling, Learning Representations for Spatial Graphs, System Resilience	(Major GPA: 4.0/4.0)
Aug, 2023 - May, 2024	MS (Systems Engineering) UC Berkeley, CA Graduate Certificate in Applied Data Science	(GPA: 3.87/4.0) (GPA: 4.0/4.0)
Jul, 2019 - May, 2023	BTech (Civil Enigneering) IIT Delhi, India	(GPA: 8.14/10.0)

PROJECTS

- **Modeling Multi-Scale Dynamics on Hierarchical Networks** [Project Description](#)
 - Infection spread modeling (COVID-19, Traffic Congestion) through Network-level SIR Models
 - Consistency in parameters at hierarchical scales ensured through Mean-Field Approximation
- **Pricing & Matching Policy Development for Ride-sharing** [Course Description](#)
 - Spatial modeling of demand patterns through Uber H3 Indexing for pricing riders accordingly
 - Development of state-based, dynamic, and optimal pricing & matching policies for ride-sharing

PUBLICATIONS

- Rafaela O.P. Amr S.A. **Aparimit K.**, Mazdak N. (Mar. 2024). “Labeling Construction, Renovation, and Demolition Waste through Segment Anything Model (SAM)”. In: *Construction Research Congress 2024*, pp. 279–288. URL: <https://doi.org/10.1061/9780784485262.029>.
- Shangqing C. **Aparimit K.** Masoud R. Francesc R., Mark H. (Nov. 2024). “Effective Management of Airport Security Queues with Passenger Reassignment”. In: *Accepted to Proceedings of IWAC (International Workshop on Air Traffic Management, Communication, Navigation, and Surveillance) 2024*. URL: <https://arxiv.org/pdf/2407.00951>.

SKILLS

Programming: Python, Git, Bash, NetworkX, Scientific & Statistical Computing, MATLAB
Machine Learning: Code Parallelization, JAX, Pytorch, PyG, Graph Representation Learning
Technical Skills: Geo-tagged Data, Map Matching, Trajectory Generation, Uber H3, Networks

GRADUATE LEVEL COURSEWORK

EECS 227AT: Optimization Models	STAT 243: Statistical Computing
INFO 251: Applied Machine Learning	CE 263H: Human Mobility & Network Science
CE 290I: Control & Information Management	CE 291D: Data-Driven Control Methods