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

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.

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.

Skills

Programming:	Python, Git, Bash, Scientific & Statistical Computing, MATLAB, NetworkX
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

INFO 251: Applied **Machine Learning**

CE 290I: **Control & Information** Management

STAT 243: **Statistical Computing**

CE 263H: Human **Mobility & Network** Science

CE 291D: **Data-Driven Control** Methods

Last updated: November 27, 2024