Kshitij Srivastava

kshitijsriv95@gmail.com | (+91) 945-870-6172 | ksriv.com

Education

Indraprastha Institute of Information Technology - Delhi, IN   **July 2018 - July 2020**

M.Tech (CSE), CGPA 8.33

Thesis: Applications of Open Transit Data

Awards:

- Appreciation for Masters Thesis
- Dean's R&D Award - 2019
- AICTE PG Scholarship - 2018-20

Activities:

- Student Mentor for 2019-20 - mentored a group of 10 Masters students.
- TA for Discrete Mathematics, Data Warehousing, Introduction to 3D design, Privacy and Security in Online Social Media

Dr APJ Abdul Kalam Technical University - Lucknow, IN   **August 2013 - June 2017**

B.Tech (CSE), 74.44%

Activities:

- Placement coordinator for 2015-16
- Head Coordinator for Renaissance committee 2015-16. Responsible for organizing the runway event and managing sponsorships

Experience

Research Assistant, Mobility and Optimisation Lab - IIIT Delhi, IN   **Nov 2020 - Current**

- Working on GTFS data creation (static and real-time) for the two transit agencies in Delhi (DIMTS and DTC)
- Responsible for enabling the integration of this data with third party vendors
- Part of the ticketing team conducting e-ticketing trials across Delhi

Consultant, Mobility and Optimisation Lab - IIIT Delhi, IN   **May 2020 - Oct 2020**

- Worked on a project to lay down policy guidelines for creation and dissemination of Open Data for Public Transport - Chennai for the World Bank

Graduate Student Researcher, Mobility and Optimisation Lab - IIIT Delhi, IN   **Jan 2019 - July 2020**

- Performed a study to evaluate the effect of the odd even scheme on traffic congestion in Delhi
- Analyzed the impact of bus breakdown on traffic congestion
- Developed a system to detect bus stop points in real-time using spatio-temporal clustering

Intern, Chartr - IIIT Delhi, IN   **May 2019 - July 2019**

- Worked on developing a multi-modal trip planning algorithm for Delhi based on static data
- Integrated this algorithm with a Django API module to be served to an android app

Intern, Tata Consultancy Services - Lucknow, IN   **June 2016 - Sept 2016**

- Developed an HTML UI Generator tool
- The tool helped non-programmers to generate desired HTML pages

Publications

Srivastava, K., Nair, S., Malik A. & Biyani, P. (**Submitted**). Bus Breakdown Detection Using Real-Time Transit Data. In 2021 IEEE ITSC.

Girsa, R., **Srivastava, K.**, Jain, A., & Biyani, P. (2021, January). Demo Abstract: Contactless E-ticketing in Public Transport Buses. In 2021 COMSNETS. [Link]

Srivastava, K., & Biyani, P. (2020, August). Applications of open transit data (Master's thesis, IIIT-Delhi). [Link]

Projects

Public Information System : *Public Transport Data, GTFS [Link]*

- Developed a plug-n-play public information system for commuters
- The information can be displayed on any display using a web browser
- Made the backend and required APIs for the application to work

Effects of Odd-Even Policy on traffic speeds in Delhi : *Policy Evaluation, Open Transit Data, GTFS [Link]*

- Studied the impact of the odd-even road rationing policy on traffic conditions in Delhi
- The study was performed using open transit data
- Observed a consistent decrement of 15-20% in travel times owing to the policy
- Work covered by major national newspapers)

Assessing the impact of bus breakdown on fuel costs : *Machine Learning, Clustering*

- Collected data for bus breakdowns from bus depot
- Using the open GTFS data of buses, categorized breakdown cases
- Used spatio-temporal DB-SCAN to detect these breakdowns in real-time
- Employed a fuel consumption model to estimate the cost of the extra fuel consumed

Skills

Programming Languages : Python, Shell scripting
Frameworks : Django, Flask, Pandas
Tools : Jupyter, Git

Languages

Hindi : Native
English : Fluent, TOEFL - 113/120