

## Proposal for announcing seat under the Institute Internship Program

1. **Name of faculty member proposing:** Dr. Nand Kumar
2. **Department/Centre:** Department of Architecture and Planning
3. **Topic on which work is proposed:** Geospatial data catalogue for urban mobility in Jaipur Smart City
4. **Preferred period of internship (after May 20<sup>th</sup>):** Between 20 May 2024 to 20 July 2024
5. **Qualification of student (branch/semester of study):** Bachelors in Planning (B.Plan) or Post graduate (Masters) qualification in Urban Planning / Management, or related disciplines from a reputed university/institute.
6. **Brief description of work (300-500 words):**

India's Smart City Mission is a significant smart city program that – compared to similar initiatives in other countries – is rolled out in a context of data scarcity and low enforcement of planning regimes. A key step of smart city initiatives outside India has often been a systematic assessment and cataloging of datasets required to develop innovative smart city applications. Such work often resulted in publicly accessible urban 'data stores'. Although there have been some attempts to build similar resources in India, the current solutions are limited to aggregate data at often state/national-level, do not clearly map to actual data needs and do not offer the geospatial detail required to support smart city applications focused on urban mobility. This project will address this gap by conducting a systematic review and assessment of data needs and existing datasets, developing essential analytical skills to collect, process and analyze granular geospatial data and evaluate them for the purpose of understanding and addressing urban mobility challenges. The project will contribute to training in urban planning and quantitative spatial analysis, which continue to be in short supply in India, and thus deliver a critical step for successful and context-sensitive smart city applications. While the initial focus will be on urban mobility challenges in Jaipur, the goal is to produce template resources for uptake in other designated smart cities.

7. **Expected learning of student (upto 100 words):**

The student will gain hands-on experience in conducting a comprehensive review and assessment of geospatial data for urban mobility planning, developing skills in data collection, processing, and analysis, and understanding the nuances of smart city applications. They will learn to critically evaluate data needs, create data catalogs, and propose solutions to address urban mobility challenges. This internship will provide practical exposure to urban planning and quantitative spatial analysis, enhancing their employability and contributing to their professional development.

**8. Nature of work: (Experimental/simulation/mathematical modelling/data collection-analysis etc.): upto 50 words**

The nature of work will primarily involve data collection, analysis, and cataloging. This includes conducting field surveys, processing geospatial data, and developing a comprehensive catalog of datasets relevant to urban mobility. It will also involve some elements of spatial analysis and modeling to address urban mobility challenges.

**9. If the seat is under project sponsored category: No**



**Signature of faculty member**

Department of Architecture and Planning

**Name of department/Centre**

Note:

- a) Proposing faculty member needs to be available at the Institute during the period internship is offered
- b) No extra space or funding than the stipend will be provided by the institute for this purpose