

SUMAN SUKUMAR DHARMASTHALA

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Education

- School of Planning and Architecture, New Delhi** India
Master of Planning – Specialization in Regional Planning July 2012 - May 2014
- Institute of National Importance; GATE Scholarship, 64% (First Class)
- National Institute of Technology, Bhopal** India
Bachelor of Planning August 2008 – April 2012
- Institute of National Importance; 80.7% (Distinction)

Experience

- Independent Researcher** March 2020 – Present
Czech Republic, Germany, India
- Research Assistant (HiWi position) in Helmholtz Centre for Environmental Research (UFZ), Department of Computational Hydro-Systems (CHS), Leipzig, Germany - from July 2021 to Oct 2021
 - Ongoing research work on Urban Heat Island Effect for European Cities in collaboration with Czech University of Life Sciences, Prague.
 - Attended Complex Networks Winter Workshop (CNWW) organized by Vermont Complex Systems Centre at the University of Vermont (USA) – (Jan 3 to 16 2021) Link: <https://vermontcomplexsystems.org/events/cnww/>
- Indian Institute for Human Settlements (IIHS)** November 2018 – March 2020
Research Associate Bangalore, India
- Research on Metropolitan Development and Land Based Financing under the PEAK-Urban project funded by Global Challenges Research Fund.
 - Published a photo essay: <https://www.epw.in/engage/article/photo-essay-study-contrasts-bengalurus-high-tech-zone>
 - Certified in Research Ethics and Compliance Training by Collaborative Institutional Training Initiative (CITI Program)
- Khatib and Alami Engineering Consultants Private Ltd.** March 2018 – November 2018
Urban Planner Bangalore, India
- Preparation of Greenfield Development Plan for 74 villages along Mumbai-Pune Expressway for Maharashtra State Road Development Corporation (MSRDC), Government of Maharashtra
- National Capital Region Planning Board (NCRPB), GoI** May 2017 – October 2017
Urban/Regional/Infrastructure Planner Delhi, India
- Integration of 6 newly added districts in the National Capital Region (55,000 sqkm) to the Regional Plan 2021 (with special focus on Chapters of: Region, Shelter/Housing, Heritage and Tourism, Environment, Disaster Management, Sewerage, Solid Waste Management, Drainage and Irrigation, Regional Land use, Demography and Settlement Pattern, Power; Base work for the next Regional Plan.
- Royal HaskoningDHV Pvt. Ltd.** June 2014 – May 2017
Assistant Manager - Planning Bangalore, India

- The work included data collection, coordination among various stakeholders, data analysis, report writing, mapping (thematic and analysis) and conducting workshops and stakeholder consultations. The work was across all sectors on which the team was working on, especially focusing on the following:
 - * **Reports, Detailed Analysis and Notes:** on Economy of Bangalore (baseline and projections), spatial estimation of employment for Traffic Analysis Zones; analysis of Socio-economic survey of 10,000 households; Spatial analysis of natural/storm water drainage of the city and assessing stream order, watershed and basins from flow accumulation from DEM (hydrology analysis).
 - * **Mapping and GIS:** Existing work centers; Creation of Traffic Analysis Zones; Land values; Building Densities and Housing typologies; Sectoral and thematic maps for various sectors including Heritage, Environmentally sensitive areas, Lakes, Solid waste management, etc.
 - * **Stakeholder Coordination and Surveys:** to coordinate and arrange workshops in 8 zone level Public Consultations; Discussions with various stakeholders, data collection and analysis of data for various sectors; Preparation and conducting Industrial perception survey and retail and wholesale markets survey, mapping and analysis and report.

Publications

- Hari, V.*, **Dharmasthala, S.***, Koppa, A., Karmakar, S. and Kumar, R. (2021) Climate hazards are threatening vulnerable migrants in Indian megacities”, in: *Nature Climate Change*. DOI: [10.1038/s41558-021-01105-7](https://doi.org/10.1038/s41558-021-01105-7). Note: * - equal contribution.
- **Dharmasthala, S.***, Hari, V.*, Cirunay, T M., Batac, C R., Koppa, A., Karmakar, S. and Kumar, R. Increased climate risk is causing substantial population displacements from agricultural intensive region across India, manuscript under preparation. Note: * - equal contribution.
- Cirunay C T., Batac R C., **Dharmasthala, S.** (2022) The efficiency of fundamental networks and their composites in the context of representative Asian cities, manuscript under preparation for: *Journal of Chaos, Solitons and Fractals*.
- **Dharmasthala, S.**, Kumar, R. (2022) Diurnal Variations in Air Temperature for European Cities, manuscript under preparation for: *MDPI Sustainability*.

Research/Professional Interests

Complex systems, network science, system dynamics, statistics and data science, energy, climate change mitigation and adaptation, ecology and environment, urban and regional systems, sustainable resource utilization, GIS, remote sensing

Computer Skills

Mapping: ArcGIS, QGIS, ERDAS Imagine, Google Earth

Statistics and Modeling: R, Python, NetLogo (learning), Matlab (learning), Postgre-SQL (learning)

Others : LaTeX, Linux, C++

Others

Nationality: Indian

Languages: English (professional proficiency), Hindi, Kannada, Tulu