

Debolina Banerjee

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Academic Qualifications:

- **PhD student** [Aug 2016-Present] Department of City and Metropolitan Planning, University of Utah.
- **Master's in Planning** with specialization in **Environmental Planning**, School of Planning and Architecture, New Delhi, India. [2011-2013] Secured First Class with an overall aggregate of 70.7%.
- **MSc. in Geography** with specialization in Environmental Geography, University of Calcutta, India. [2008-2010] Secured First Class with an overall CGPA of 4.93 out of 6.00 (A+).
- **BSc. in Geography (Honours)**, Gokhale Memorial Girls' College, University of Calcutta, India. [2005-2008] Secured First Class with an overall aggregate of 63.5%.
- Higher Secondary Examination, West Bengal Council of Higher Secondary Education, [2003-2005] Secured First Division with overall aggregate of 77.8%.
- Secondary Examination, West Bengal Board of secondary Education [2003] Secured First Division with overall aggregate of 79.4%.

Current Position: [Aug-2016-Present]

- **Research Assistant** at Center for Ecological Planning and Design [CEPD], Department of City and Metropolitan Planning, University of Utah
 - Working on US EPA Grant [Project title: Prediction of Nonlinear Climate Variations Impacts on Eutrophication and Ecosystem Processes and Evaluation of Adaptation Measures in Urban and Urbanizing Watersheds].

Professional Experiences:

1. Work Experience in Industrial and Research Field:

Research/Project Assistant:

November 2014 - Present

For **Clean Air Asia, India** posted in Department of Civil and Environmental Engineering, **The Hong Kong Polytechnic University** (under **Fredskorpset Norway South-South Exchange Program**).

Key Research Responsibilities: Providing research support in air quality management projects and non-motorized transport studies.

- **Executed a Research Study on Health Exposure & Air Quality Assessment in Asian Cities:** The study included Air Quality measurements, Lung Function Tests, Extensive field surveys and questionnaire survey in various locations in Kolkata. The impacts and analysis was documented for a journal paper and detailed technical report was generated.
- **Analysed In-Vehicle Air Quality in Mass Transit Rail & KMB Buses in Hong Kong:** Conducted a detailed air quality monitoring survey in public transport modes and on roadside at various location of Hong Kong. The results were compared and analysed with similar studies in other Asian cities and the research work was developed for a journal article.
- **Contributed in Developing, Designing & Testing the 'Walkability' Mobile App:** Critically reviewed an existing mobile application on walkability and air quality monitoring. Provided detailed insights on various designer aspects for upgradation and performance improvements for the app.
- **Conducted a Crowding Study Report for Public Transport Modes in Kolkata, India:** Actively took part in the field survey and managed a small team of volunteers in conducting the study. Crowd rating survey along with the preferences in choice of travel modes were statistically evaluated which formed the basis of an algorithm on diversity in crowding perception among respondents.
- As part of **Clean Air Asia Network & Partnership Building** following tasks were conducted:
 - **Organised an International Seminar** on Air Quality/Non-Motorized Transport in University of Calcutta which ultimately developed strong ties between Clean Air Asia, The Hong Kong Polytechnic University and The Dept. of Geography [University of Calcutta].
 - **Participated in Enhancing the Clean Air Asia network** through organising and implementing various associations among Urban Planning firms and Urban Planners in city of Hong Kong.

- **Responsible for Organising and Arranging the business meeting** between one of the top Hong Kong planning firm and Clean Air Asia, India to develop joint project on NMT and 'Walkability' mobile application usage and enhancements.
- **Fostered Industry Relationship through organising talks/meeting** with other industry partners like UDPCLT, 'Inno-Wear' Wrist bands leading to joint projects on walkability and non-motorised transport.

2. **Work Experience in Academic Field:**

Assistant Professor of Planning :

Aug 2013 – June 2014

For **School of Planning and Architecture, Vijayawada (SPAV)** which is an autonomous centrally funded technical institution (CFTI) Institution of National importance under Ministry of Human Resource Development, **Government of India.**

Key Responsibilities: Work involved in conceptualizing study plans, giving weekly lectures, assignment plans, final exam and evaluation along with handling Planning and Design Lab for M.Plan (Environmental Planning) students, I and II Semester.

- **Subjects taught included Introduction to Environment and Housing,** Elements of Economics, Ecology and Environment, Introduction to Infrastructure, Environmental Economics and Planning & Design Studio.
- **Undertook several key administrative roles in the School with respect to institution** building and programme development such as Examinations, Campus Development, Procurement of instruments and Development of Environmental Labs, etc.
- **Actively involved in preparation of research proposals, workshops, and academic activities** in the institution.

Internship:

- **Kolkata Metropolitan Development Authority – India** (*Trainee Project Assistant*)
Worked as trainee under Kolkata Metropolitan Development Authority for the project – 'Peri-urban Development Plan for Chinsura-Mogra Panchayat Samity, Hugli'.

Professional Membership:

- **2017- Student member American Planning Association [Utah Chapter]**
- **2013 - IGBC (Indian Green Building Council) Accredited Professional for Green Buildings.**
- 2015- Regional Science Association, India.
- 2015- Geographical Society of India.

Presentation at Conferences:

- 1) **Title of Conference: Integrated Modeling Framework for Improved Future Management of the Utah Lake-Jordan River Watershed** [November 2017].
Venue: 11th Annual Salt Lake County Watershed Symposium 2017
 - This poster presentation discusses about the various models used to model Jordan River and Utah Lake water quality and quantity for future based on various development scenarios of the related watershed.
- 2) **Title of Conference: How the Built Environment [and hence Planning] affects Walkability and Walking [Co-presented by Reid Ewing and Guang Tian]** [November 2017]
Venue: Utah Pedestrian Summit 2017
 - This presentation discusses various urban design qualities at city block level and how they can be operationalised to measure the walkability of that area. Various statistical tools have been used to conduct this study in downtown Salt Lake City.
- 3) **Title of Conference: Assessment of Urban Air Pollution near Schools and Health Exposure Study on School Children: Case-Study-Kolkata** [June 2015].
Venue: The Hong Kong Polytechnic University, CEE [Civil and Environmental Engineering] Department.
 - This paper discusses about the air quality around schools in urban areas and measures the health impact through lung function testing of school children. This work tries to focus on the possible sources and mitigative measures along with comparative analysis of several Asian cities.
 - **Paper accepted in Journal of Regional Science (ISSN 0046-9017) for their next issue.**

- 4) **Title of Conference: Urban Biodiversity & Planning for Eco-Sensitive Corridors** [November 2013].
Venue: International Seminar on "Corridors, City-Regions and Cities in Urban and Regional Development" organised by School of Planning and Architecture – Vijayawada.
 - This work discusses about the ecological significance of biodiversity in maintaining ecosystem balance in urban areas. The case study discussed on habitat management of urban wetland and conservation issues.
- 5) **Title of Conference: Review of UDPFI Guidelines: Additions & Incorporations** [January 2014].
Venue: Workshop on Revision of UDPFI Guidelines, organized by TCPO and Mott-Macdonald, University of Mysore.
 - The focus of this presentation was critical evaluation of existing planning norms and enumerating new guidelines. The existing guidelines were reviewed with respect to their environmental implications suggesting a new approach for local area and district planning so that the overall environmental concern at urban and regional level can be adequately managed.

Technical Skills:

- Design software: AutoCAD 2005, 2006, 2010.
- Mapping software: ArcGIS, MapInfo.
- Microsoft Office Package: Word, Excel, Access, PowerPoint, Publisher
- Statistical software: SPSS.
- Air quality monitoring and analysis instruments: TSI Dust-Track, Interscan analyzer, Gas Chromatography (GC/MS) system for VOC analysis.

Academic Projects as Student:

- I. **MASTERS' THESIS (2013)**
Conservation of Urban Biodiversity, Salt Lake Municipality, Kolkata, India.
 - *Habitat Assessment Map, City Biodiversity Index, Mapping landscape elements, drawing Conservation Plan for Biodiversity Rich Areas.*
- II. **STUDIO WORK (2012)**
Environmental Conservation & Management Plan, Udupi District, Karnataka, India.
 - *Natural Resource Analysis, Vulnerability Mapping, Sensitivity Analysis, Conservation and Land Utilization Plans. Member of core group and served as prime report editor for the study.*
- III. **STUDIO WORK (2012)**
Environmental Improvement Plan, Poanta Sahib, Himachal Pradesh, India.
 - *Analysis of physical and social infrastructure incorporating the Healthy City Concept and Quality of Life Index. Member of core group for the study and involved in editing the report.*
- IV. **STUDIO WORK (2011)**
Perspective Plan, Khandwa and Burhanpur District, Madhya Pradesh, India.
 - *Analysis of Land Use, Demographics, Infrastructure, Economy, Environment, Housing Present Situation and Proposal for Future.*
- V. **MASTERS' DISSERTATION (2010)**
E-waste – An Urban Environmental Problem, Kolkata Metropolitan Area, India.
 - *Assessing the Present Source of E-Waste, Estimating the Quantity, Calculating obsolescence period, measuring awareness among IT Sector, Students etc., field study in informal E-waste recycler in their workshops etc.*
- VI. **Other Academic Works During M.Plan, MSc., BSc. :**
 - *Area appreciation of Rajendra Place District Centre, New Delhi.*
 - *Site planning of a given area incorporating all characteristics of a neighborhood.*
 - *Mountainous Environ of the Western Himalayas- A Case Study of Uttarkasi.*
 - *Panchayat Initiatives towards Female Self-Reliance: Case Study of Village Muluk, District Birbhum, 2007.*

Scholastic Achievements:

- **Received GCSC [Global Change & Sustainability Center] Fellowship 2016-17**
- Received "Abhijit Bhattacharya Memorial Prize" Scholarship for **securing 1st Rank (BSc. Geography HONs.) in College.**

- Topped my batch in Economics during High School [academic year 2004 and 2005].
- Won 2nd Prize in Debate for School House Competition.

Extracurricular Activities:

- Won 1st Prize at School sports for Karate Display [higher secondary level].
- Won 1st Prize for Tenniquoit Match during School Sports [higher secondary level].
- Won 2nd Prize for several racing events in School Sports [higher secondary level].
- Articles published in college magazines:
 - 'Global warming' – 2006.
 - 'A Journey to Look Back to' – 2006.
 - 'Environment – What we are doing to it.... To Us' – 2007.
- Organized and participated in neighborhood painting competition.
- Home tutored students of primary section free of cost, provided help and support in their curriculum.
- Organized an International Seminar at University of Calcutta on Air Pollution and lectures delivered by Professors of The Hong Kong Polytechnic.
- Actively worked towards the preparation of "**The International Seminar on Urbanization and Sustainability**" jointly organized by University of Calcutta & Regional Science Association to be held during Jan'16.

Additional Information:

- **TOEFL iBT** score as taken on Oct'14:
28-Reading, 29-Listening, 24-Speaking, 29-Writing with an overall score of **110** out of 120.
- **GRE (Graduate Record Examination)** score as taken on 6/01/2016: **315**.