

# Dr. Debapratim Pandit

Ph.D,(Urban Engineering), University of Tokyo.

ORCID ID: <https://orcid.org/0000-0003-3149-4747>

Scopus Author ID: 55785578100

Google Scholar ID: <https://scholar.google.co.in/citations?user=ammjCRUAAAAJ&hl=en>

Web of Science Researcher ID: AAF-2760-2019

## Contact Information:

---

**Office:** Department of Architecture and Regional Planning,  
Indian Institute of Technology, Kharagpur. India. Pin: 721302.  
Phone (office): +91-3222-283202, Mobile: +91-9433944708  
Email: debapratim\_pandit@yahoo.com, debapratim@arp.iitkgp.ac.in



## Research laboratories and fields of interests

---

**City future research group** (2019: 1 Postdoc, 12 PhD scholars, 4 Post Graduate, 2 B.Arch)

**Laboratories:** Urban informatics laboratory, Advanced Transportation & simulation laboratory

### a) Advanced Transportation planning:

- i) Landuse Transport interaction modeling (Activity based models, Behavioral models on mode choice, Transit oriented development) and Intelligent transportation systems.
- ii) Non-motorized transportation (Bicycle and pedestrian infrastructure & facilities, Public bicycle sharing, Last Mile Connectivity).
- iii) Public transportation (Bus transit & BRT service design, service optimization, route design and rationalization, Feeder service design).
- iv) Shared mobility & logistics (Ridesourcing, Hyper local delivery)

### b) Urban informatics, software development and Internet of things

- i) [www.pubbs.in](http://www.pubbs.in) : Recently we developed a smart **IOT enabled bicycle lock** and associated software for **bicycle sharing systems** and a **smart bicycle station** as well which involved developing the sharing and redistribution models, the product design, the electronic and mechanical circuit design, microcontroller programming, server side programming, user interface design and application development.
- ii) [www.pubbs.co.in](http://www.pubbs.co.in): Another product developed is a **software for bus route planning and design** for bus operators to determine fleet size, bus service design and timetable development, vehicle scheduling, mixed fleet operation planning etc. This project is funded by the Ministry of Housing and Urban Affairs.
- ii) We are currently developing a **software suite** for bus dispatch, control and surveillance using **artificial intelligence** and user perception.

### c) Urban Utilities & Services:

- i) Sanitation and drainage (Urban & Rural sanitation issues like service delivery, benchmarking, willingness to pay).
- ii) Municipal solid waste management.
- iii) Urban air pollution and Quality of life for senior citizens.

## Professional experience

---

- a) **Senior manager** (February 2008-October 2008)  
“South City Projects (Kolkata) Pvt. Ltd., India.
- b) **Assistant Professor** (October 2008- January 2015)  
Department of Architecture and Regional Planning(ARP),  
Indian Institute of Technology, Kharagpur, India.
- c) **Associate Professor (February 2015 – present)**

### Major existing administrative duties in IIT, Kharagpur

#### Department:

##### Current:

- a) Research Scholar Coordinator, Architecture and Regional Planning
- b) Professor In-charge, Computer & Informatics Laboratory
- c) Professor In-charge, Advanced Transportation and Simulation Laboratory
- d) Member, Departmental Academic Committee, Write-off Committee, Events Committee, Purchase Committee
- e) Professor In-charge, Computer print lab
- f) Co-In-charge, Departmental reporting authority for non-faculty APAR
- g) Development plan Field Tour Co-ordination committee (Conducted 10 development plans for 10 cities all over India)

##### Earlier:

- a) Professor In-charge, UG training and placement
- b) Faculty advisor/Course coordinator (ARP)

#### Institute:

- a) PMRF Coordinator-member in Nodal Committee Team (since 2018)
- b) Institute UG induction Program, 2018, Transport Coordinator
- c) INTCON 2018, 6th SPIC MACAY International Convention 2018, IIT Kharagpur, Organizing (Transport) Committee member
- d) Program officer (Health and Fitness), Institute extra academic activity (2013-2015 July)
- e) GATE confidential duties
- f) GATE IR duties

## Education

---

- September 2007 • **Ph.D**, University of Tokyo, Japan.  
Department of Urban Engineering. Environmental Systems laboratory.
- May 2004 • **Masters in City Planning**, Indian Institute of Technology, Kharagpur.
- June 2002 • **Bachelor of Architecture**, Jadavpur University, Kolkata, India.  
Department of Architecture.
- Certificate courses • “Remote Sensing and GIS Applications in Urban and Regional Planning”  
*Indian Institute of Remote Sensing, Dept. of Space, Govt .of India.*
- “Basic Aspects of Lighting” *School of Illumination Science, Engineering and Design. Jadavpur University, Kolkata, India.*

## **Research Guidance**

---

- a) Phd Guidance: 4 single guidance completed (2 awarded and 2 submitted), 10 ongoing.
- b) DSC member for 11 students (7 ARP & 2 Civil and 2 RCGSIDM)
- c) Masters of City Planning (36 completed, 4 ongoing)
- d) Bachelors of Architecture (14 completed, 2 ongoing)

## **Membership of Professional Bodies**

---

1. Council of Architecture
2. Transport Research group of India
3. Institute of Town Planners India (**Associate Member**)

## **Awards and honors:**

---

1. **Monbukagakusho (MEXT) Scholarship**, Govt. of Japan, Ministry of Education, 2004 - 2007.
2. **Graduate Aptitude Test in Engineering Scholarship**, Govt. of India. 2002 - 2004
3. **National Scholarship Award**, Govt. of India, 1995.
4. **Award Best Poster Award** (S Saha, S Basu and D Pandit) World Congress of Gerontology and Geriatrics: 3rd International conference on Healthy Ageing in the changing world, 2014

## **Member/Reviewer Editorial board:**

---

### **Journals:**

- a) Public Transport (Springer), b) Transport (Taylor Francis) c) Environment and Planning B
- d)Transportmetrica: Transportation science A (Taylor Francis), e) Transport policy(Elsevier)
- f) Asian transport studies journal (Eastern Asia Society for Transportation Studies (EASTS)),
- g) Travel behavior and society(Elsevier), h) Case Studies on Transport Policy(Elsevier)

### **Conferences:**

- a) World Conference on Transport (2016,2019), b) Conference of Transportation research group of India (since 2011) c) Computers in Urban Planning and Management Conference.

### **Other recent academic review duties:**

1. Master of Urban Planning Thesis Jury at NIT Patna (full batch) 11th May 2018
2. Examiner for MS Thesis from Computer Science Department, IIT Kharagpur

## **Courses taught**

---

### Present courses taught:

#### **Post-Graduate:**

1. Development Plan (Planning Workshop 2)
2. Urban utilities and services (Water supply, Drainage, Sanitation, Solid waste management)
3. Advanced Transportation Planning
4. Urban informatics

#### **Undergraduate:**

1. Architectural Design (4th Year)

### Earlier courses taught:

1. Construction project management
2. Water Supply and Sanitation

### **Development plans undertaken as part of course taught**

- Development strategies for Midnapore Kharagpur Planning Area, West Bengal (2009)
- Strategic actions for Development of Balasore Planning Area (2010)

- Korba Development Plan 2031 (2011)
- Talegaon, Maharashtra Development Plan (2012)
- Development plan of Rourkela, Orissa-Vision 2031 (2013)
- Development plan of Hazaribagh, Jharkhand -Vision 2031 (2014)
- Development plan of the city of Bhilwara, Rajasthan (2015)
- Development plan of Kalyani, West Bengal (2016)
- Development plan of Alipurduar, West Bengal(2017)
- Development plan of Bidhannagar Municipal Corporation (2018)
- Development plan of Jhargram Municipal Area (2019)

## **Consultancy and Research Projects:**

### ***Principal Investigator:***

1. An Intelligent Urban Bus Transit Dispatch, Control and Surveillance System using Artificial Intelligence and User Perception Sponsored By: Ministry of Housing and Urban Affairs Project Value: Rs. 99.4 lakhs. Status : Ongoing
2. Developing Appropriate Software and Hardware for Fully Automated Self Service Bicycle Share System: Pilot Study in IIT Campus Sponsored By: Ministry of Housing and Urban Affairs Project Value: Rs. 119.68 lakhs. Status : Ongoing
3. Framework for improving bicyclists accessibility to rail stations. Sponsored By: MHRD, Government of India, Project Value: Rs. 32.32 lakhs. Status : Completed
4. Improving quality of life of senior citizens in residential neighborhoods in an Indian context. Sponsored By: MHRD, Government of India, Project Value: Rs. 31.72 lakhs. Status : Completed
5. Development of a Methodology for Bus Transit Reform and Redesign: Case study Kolkata. Sponsored By: ISIRD, SRIC, IIT Kharagpur, Project Value: Rs. 2.8 lakhs. Status : Completed
6. Service level optimization between public bus and para-transit services along a transport corridor (Sponsored By: Ministry of Urban Development, Project Value: Rs. 75.84 lakhs) Status: Completed
7. Cycle hire system in action Area-1 in Newtown, Kolkata (Client: West Bengal Housing Infrastructure Development Corporation LTD., Project Value: Rs. 24.00 Lakhs. Status: Completed)
8. Mobility Improvement Plan for NDITA (Client: Nabadiganta Industrial Township Authority Project Value: Rs. 40.00 Lakhs. Status: Completed)
9. Planning and Design of Bicycle Track along the Saltlake Bypass Road, Kolkata (Client: Nabadiganta Industrial Township Authority Project Value: Rs. 17.2 Lakhs. Status: Completed)

### ***Co-Principal Investigator:***

10. Future of cities (FOC). Sponsored By: MHRD, Government of India, Project Value: Rs. 25 crores, Status : Ongoing
11. Convergent Lab for Digital cum Spectral Analytics of Historical and GeoArchaeological (Driven) Iconography Sponsored By: SRIC, IIT Kharagpur Rs. 36 lakhs, Status : Ongoing
12. Making of a survey on sustainability of tourism industry in Kerala/Thrissur. Sponsored By: Prof. Tetsuo Shimizu, Department of Tourism Science, Tokyo Metropolitan University, Project Value: Rs. 3.74 lakhs. Status : Completed

13. Making of report on Vulnerability of Cities. Sponsored By: The GCOE program, The University of Tokyo, Global Center of Excellence for Sustainable Urban Regeneration, Project Value: Rs. 2.77 lakhs. Status : Completed
14. Development Plan Preparation for Korba Urban Area. Sponsored By: The Director, Directorate of Town & Country Planning, Chhattisgarh, Project Value: Rs. 29.9 lakhs.
15. Perspective Plan for MKDA region. Sponsored By: Midnapore Kharagpur Development Authority.

## **Products developed:**

### **1. PUBBS TRANSIT software**

(Bus service design, timetable development & vehicle scheduling software for bus operators) Developed in partial fulfillment for the project titled "Service Level Optimization between Public Bus and Para-transit Services along a Transport Corridor" (K-14011/18/2011-UT, dated 29-12-2015) Ministry of Housing and Urban Affairs, GoI 2019. (As a part of PhD research of Krishanu Santra)

### **2. PUBBS Bicycle Sharing System**

(Software suite for bicycle sharing including user interface and system management software) Developed in partial fulfillment for the projects titled " Framework for improving bicyclists accessibility to rail stations" (F. NO. 4-22/2014-TS.I , Dt. 23-01-2014) Ministry of Human Resource development, GoI 2018 & Developing Appropriate Software and Hardware for Fully Automated Self Service Bicycle Share System: Pilot Study in IIT Campus( K14011/18/2011-UT-IV(a) , Dt. 22-02-2019), Ministry of Housing and Urban Affairs, GoI 2019.

### **3. PUBBS smart bicycle lock** (1st Made in India IOT enabled bicycle lock, (BluLock & Glock)

Developed in partial fulfillment for the projects titled " Framework for improving bicyclists accessibility to rail stations" (F. NO. 4-22/2014-TS.I , Dt. 23-01-2014) Ministry of Human Resource development, GoI 2018 & "Developing Appropriate Software and Hardware for Fully Automated Self Service Bicycle Share System: Pilot Study in IIT Campus"( K-14011/18/2011-UT-IV(a) , Dt. 22-02-2019), Ministry of Housing and Urban Affairs, GoI 2019.

### **4. Smart bicycle station** (RFID based access control and parking system), Developed in partial fulfillment for the projects titled "Cycle Hire System in Action Area-I in New Town, Kolkata" (1047/HIDCO/Ping/666/2015 , Dt. 21-12-2015), West Bengal Housing Infrastructure Development Corporation Ltd., 2016.

## **Recent Publications:**

### **Book Chapters:**

1. Designing Sustainable Products, Services and Manufacturing Systems, Chapter 8: A model for sustainable neighborhood regeneration towards an efficient urban form. By Debapratim Pandit and Keisuke Hanaki, Published by Research Publishing Services, Singapore, 2011. Reference, ISBN: 978-981-08-5466-9.

2. District Human Development Report, Paschim Midnapore: Chapter 8:Industrialization, Urbanization and Environment by Debapratim Pandit and Arif Merchant Published by Development and Planning Department, Government of West Bengal, May 2011.
3. Using Air Pollution Health Risk Assessment for Future Land use Planning in Korba India. By Debapratim Pandit & Subrata Chattopadhyay. (2011). Innovations inSharing Environmental Observations and Information (Part 1) Published by ShakerVerlag Aachen, Page 151-160, ISBN: 978-3-8440-0451-9.

### **Publication in Refereed Journal/s[International]**

1. Rashid M., Pandit D., Rural communities' perception of and willingness to pay for wastewater and storm-water management infrastructure in Bihar, India, Journal of Water Sanitation and Hygiene for Development, 2019(Accepted).
2. Bose T., Pandit D., Heterogeneity in perception of service quality attributes of bus transit across various user categories- A case of Kolkata, Transportation Research Procedia Journal Elsevier(Accepted), ISSN: 2352-1465, 2019
3. Sharma D., Pandit D. et.al., Determination of service quality attributes based on user perception for paratransit services in developing country like India, Transportation Research Procedia Journal Elsevier(Accepted), ISSN: 2352-1465, 2019
4. Chakraborty J., Pandit D, et.al., A Protocol for Simulation Modeling of Ridesourcing Services: Optimisation of Fleet Size in an Urban Environment, International Journal of Intelligent Transportation Systems Research, <https://doi.org/10.1007/s13177-019-00197y>, pp 1-10, 2019
5. Rashid M., Pandit D., Determining the provision of wastewater management infrastructure in rural India from the local communities' perspective, Water Science & Technology, 79(3), pp 489-500 2019.
6. Rashid M., Pandit D., Analysis of service quality of household toilets expected by households practicing open defecation: A study in rural settlements of Bihar, (India.), Environment, Development and Sustainability 21(5), 2487-2506, 2018.
7. Rashid M., Pandit D., Determination of appropriate service delivery level for quantitative attributes of household toilets in rural settlements of India from user's perspective, Environmental Management, 61(4), pp.637-649, 2018.
8. Rashid M., Pandit D., Determination of appropriate service quality attributes for household toilets in rural settlements of India based on user perception, Environment, Development and Sustainability, 19(4), pp.1381-1406, 2017.
9. Rashid M., Pandit D., Service quality of household toilets in rural settlements India: An assessment from user's perspective, Journal of Water Sanitation and Hygiene for Development, 7(4), pp.589-600, 2017.
10. Das S., Pandit D., Methodology to determine service delivery levels for public transportation, Transportation Planning and Technology, 39 (2), pp. 195-217, 2016.
11. Das S., Pandit D., Qualitative assessment of public facilities: the public bus, The TQM Journal, 28(2), pp. 275-294, 2016.
12. Das S., Pandit D., Determination of level-of-service scale values for quantitative bustransit service attributes based on user perception, Transportmetrica A: Transport Science, 11(1) pp. 1-21, 2015.
13. Pandit D., Das S., A Framework for Determining Commuter Preference along a Proposed Bus Rapid Transit Corridor, Procedia-Social and Behavioral Sciences, 104, pp.894-903, 2013.
14. Chattopadhyay S., Pandit D., et.al., An investigation on location choice for housing in mining towns: Case study of Korba, International Journal for Housing Science & its Application, 37(2), pp. 63-74, 2013.
15. Das S., Pandit D., Importance of user perception in evaluating level of service for bus transit for a developing country like India: a review, Transport Reviews, 33(4), pp. 402420, 2013.

### **Publication in Refereed Journal/s[National]**

1. Reddy P.H., Pandit D., A Framework for Improving MSWM Efficiency in Different Types of ULBs: Case Study Bellary District Karnataka, NCHF Bulletin, 31(5), pp. 2530, 2018.
2. Bose T., Pandit D., A Methodology to Prioritise Service Quality Attributes for Bus Transit- A Case Study of Visakhapatnam, Urban Transport Research Journal (Accepted), ISSN 2395-2492, 2018.
3. Maparu T. S., Pandit D., Bus Route Merging and Frequency Setting Methodology for Bus Rapid Transit Trunk Corridor: A Case Study of Kolkata, Space: The SPA Journal of Planning and Architecture, 16(2), pp. 16-37, 2012.
4. Das S., Pandit D., Methodology to identify the gaps in the level of service provided for urban bus transit: Case study Kolkata, Spandrel,4(spring), pp. 59-71, 2012
5. Saha S., Basu S., and Pandit D., Relevance of New Urbanism in the context of developing countries: a literature review, Abacus, 8(1), pp. 19-27, 2013.
6. Maparu T. S., Pandit D., A Methodology for Selection of Bus Rapid Transit Corridors: A Case Study of Kolkata, Institute of Town Planners, India Journal, 7(4), pp. 21-36, 2010.

### **Publication in Proceeding of Seminars/Conferences[International]**

1. Sinha D., Pandit D., Cost modelling of hyper-local food delivery in an urban area- A case study of Kolkata, Geophysical Research Abstracts Vol. 21, Proceedings of EGU 2019-17218, 2019 EGU General Assembly 2019.
2. Saha S., Basu S., and Pandit D., Influence of neighborhood attributes on the perception of quality of life of the elderly in India, Proceedings of the 31st International PLEA Conference, 2015.
3. Saha S., Basu S., and Pandit D., The elderly and the city: Improving the Quality of life (QoL) of elderly citizens, Proceedings of the International symposium on Megacities, 2014.
4. Pandit D., Das S., A framework for bus transit reform & redesign: Case study Kolkata, Proceedings of the 13th International Conference on Computers in Urban Planning and Management, 2013(SCOPUS).
5. Das S., Pandit D., Methodology to determine Level of Service for Bus Transit in a developing country like India, Proceedings of the 13th International Conference on Computers in Urban Planning and Management, 2013(SCOPUS).
6. Pandit D., Maparu T., A methodology for bus transit system reform & redesign: Case study Kolkata, Proceedings of the 12th International Computers in Urban Planning and Management Conference, 2011.
7. Pandit D., Hanaki K, Integrated simulation of neighborhood scale land use and transport dynamics for multi-criteria evaluation of transit oriented development, Proceedings of the 10th International Computers in Urban Planning and Management Conference, 2007(SCOPUS).
8. Pandit D., Hanaki K, Planning for Sustainable Future Cities: Optimizing Density, Transportation, Land use and the Natural Support Systems, Proceedings of the International Society of Industrial Ecology Conference, 2007.
9. Pandit D., Towards a Sustainable Knowledge Society - Cultural diversity to networked Interculturality, Proceedings of the WSC-SD, 2006.

### **Publication in Proceeding of Seminars/Conferences[National]**

1. Sharma D., Pandit D., Review of operational parameters of paratransit services: A case of Kolkata, Proceedings of the 11th Urban Mobility India (UMI) Conference and Expo, 2018.
2. Sharat V., Pandit D., Methodology for determining the size of stations and overall fleet requirement for a public bicycle sharing system in India- A case study of New Town, Kolkata, Proceedings of the 4th Conference of the Transportation Research Group of India, 2017.

3. Das S., Pandit D., Level of Service parameters for bus transit in the Indian Context, Proceedings of the 1st Conference of Transportation Research Group of India, 2011

### **Poster presentations:**

1. Sharma N., Pandit D.(2018), Human Exposure Assessment of Air Pollution induced by Urban Traffic: a case of Kolkata, National Symposium on Sustainable Cities: Planning & Designing for Green Urban Mobility, IIT Kharagpur(2018)
2. Suparna Saha, Sanghamitra Basu and Debapratim Pandit (2014), "Improving Quality of Life of elderly women in India: Interventions in the neighborhood context", Presented at the World Congress of Gerontology and Geriatrics, 3rd International conference on Healthy Ageing in the changing world, 17-19 November, 2014, Bengaluru, India..... **Best Poster award.**
3. Debapratim Pandit (2009), " Sustainable transportation", First Indo-German frontiers of Engineering Symposium, IIT Madras, (2009)

### **Technical reports/books**

1. Pandit D., Handbook on Feasible Service Delivery Level Ranges for Bus Transit: Part 1: User perceptive, Submitted in partial fulfillment for the project titled "Service Level Optimization between Public Bus and Para-transit Services along a Transport Corridor" (K-14011/18/2011-UT, dated 29-12-2015, Ministry of Housing and Urban Affairs, GoI 2019.
  2. Pandit D., Handbook on Feasible Service Delivery Level Ranges for Bus Transit: Part 2: Operator perceptive, Submitted in partial fulfillment for the project titled "Service Level Optimization between Public Bus and Para-transit Services along a Transport Corridor" (K-14011/18/2011-UT, dated 29-12-2015) Ministry of Housing and Urban Affairs, GoI 2019.
  3. Pandit D., Handbook on Para-transit Service Design in Indian Context: Part 1: Operation and Regulation, Submitted in partial fulfillment for the project titled "Service Level Optimization between Public Bus and Para-transit Services along a Transport Corridor" (K-14011/18/2011-UT, dated 29-12-2015) Ministry of Housing and Urban Affairs, GoI 2019.
  4. Pandit D., Handbook on Para-transit Service Design in Indian Context: Part 2: Integration, Submitted in partial fulfillment for the project titled "Service Level Optimization between Public Bus and Para-transit Services along a Transport Corridor" (K-14011/18/2011-UT, dated 29-12-2015) Ministry of Housing and Urban Affairs, GoI 2019.
- Detailed Project Reports
5. Pandit D., Detailed Project Report: Bicycle Track along the SaltLake Bypass Road, Kolkata, Submitted in partial fulfillment for the project titled "Planning and Design of Bicycle Track along the Saltlake Bypass Road, Kolkata" sanctioned by Nabadiganta Industrial Township Authority, 2017
  6. Pandit D., Detailed Project Report: Mobility Improvement Plan for NDITA, Submitted in partial fulfillment for the project titled " Mobility Improvement Plan for NDITA" sanctioned by Nabadiganta Industrial Township Authority, 2017
  7. Pandit D., Detailed Project Report: Public Bicycle share and Private bicycle Parking System-Action Area 1, Newtown, Submitted in partial fulfillment for the project titled " Cycle Hire System in Action Area-I in New Town, Kolkata" (1047/HIDCO/Ping/666/2015 , Dt. 21-12-2015), West Bengal Housing Infrastructure Development Corporation Ltd.,2016.
  8. Pandit D., Project Report: Development of a Methodology for bus transit system reform and redesign: Case study Kolkata Submitted to ISIRD SRIC, IIT Kharagpur, August 2013
  9. S. Sen J., Pandit D., Project Report: Making of a survey of traditional ayurvedic industry in Kerala (in relationship to Kerala's tourism industry) Case study: Ayurveda industries of Thrissur, Kerala Submitted in partial fulfillment for the project titled "Making of a survey on Sustainability of Tourism? industry in Kerala/ Thrissur", 2012



10. Sen J., Pandit D., Project Report: A Preparatory study on selection of candidate cities/industries and evaluation under the research Project on Case Study on Resilient and Sustainable Urban development Models in India, Submitted in partial fulfillment for the project titled "Vulnerability of Cities" for Center for Sustainable Urban regeneration (cSUR), the University of Tokyo, 2011
11. Pandit D., Service Level Optimisation between Public Bus and Para-transit Services along a Transport Corridor: Summary Report, Submitted in partial fulfillment for the project titled "Service Level Optimization between Public Bus and Para-transit Services along a Transport Corridor" (K-14011/18/2011-UT, dated 29-12-2015) Ministry of Housing and Urban Affairs, GoI 2019.
12. Pandit D., PUBBS transit Software Manual Submitted in partial fulfillment for the project titled "Service Level Optimization between Public Bus and Para-transit Services along a Transport Corridor" (K-14011/18/2011-UT, dated 29-12-2015) Ministry of Housing and Urban Affairs, GoI 2019.

### **Workshop organized**

1. Urban Informatics and Artificial Intelligence Driven Analytics (As Cordinator) Year: 2018 Participants: 120
2. Workshop organized Enhancing Well Being of the Elderly in Indian Neighborhoods, Kolkata, India (As Cordinator) Year: 2015 Participants:50
3. INTCON 2018, 6th SPIC MACAY International Convention 2018, IIT Kharagpur(As Organizing (Transport) Committee member) Year:2018 Participants:1300
4. Workshop organized Knowledge Beyond Boundaries: The role of Interdisciplinary Communication in Intellectual Property and Technology Transfer at WSC-SD Conference, 2006. Rasa, Switzerland(As coordinator) Year:2006 Participants:30
5. Seminar invited Organized Lectures by Dr. Tetsuo Shimizu, Associate Professor, Department of Civil Engineering, University of Tokyo, Japan Year:2009 Participants: 60

### **Recent Invited lectures/seminars/workshops/symposiums**

- a) Lecture on "Activity based modeling" at Ranbir and Chitra Gupta School of Infrastructure and Design, IIT Kharagpur, TEQIP-III Course, India (2018)
- b) Lecture on "Bicycle sharing system" at the "Urban Informatics and Artificial Intelligence Driven Analytics" symposium at the Department of Architecture and Regional Planning, IIT Kharagpur (2018)
- c) Lecture on "Public cycle sharing scheme" at HIDCO, West Bengal 16th October 2015.
- d) Lecture on "Effective planning for transport management in Bidhannagar Municipal Corporation" at Poura Bhawan (Bidhannagar Municipal Corporation) West Bengal 11th August 2017.
- e) Special invitee to workshop on "Big data for better governance-Promoting data driven policy making and governance in west Bengal (November 28-29, 2017
- f) Special invitee for roundtable discussion and lecture at the "International Symposium on Frontiers Of Infrastructure Finance (ISFIF)"- 14th Decemeber, 2017
- g) Special invitee to workshop on " International Symposium on Infrastructure Design and Management" 26TH February, 2015
- h) Special invitee to workshop on "Indo-German Workshop on Intelligent Mobility " at the Indo-German Collaborative Research Center on Intelligent Transportation Systems, IIT Khaaragpur, 29th October,2018.

---

Date: 1/12/2019

Signature:

