

Dheeraj N Kumar

Contact Details: +91-9886390800
Location: #21, 10th Main, 4th Cross,
Hampi Nagar, Vijayanagar II Stage,
Bangalore – 560 104.
Email: dheeraj_apr11@yahoo.com

EDUCATION

Qualification	Year of Passing	% of Marks	College/University
Ph.D	2023		Visvesvaraya Technological University
M.Tech - TEM	September, 2009	74.25	BMS College Of Engineering
B.E. - CIVIL	January,2007	63.04	Dr. Ambedkar Institute of Technology, Bangalore

TECHNICAL SKILLS

Application frameworks	Mx-Road(Basic), Auto Cad, Autolisp, Loop, Microsoft Office, Staad Pro
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MEMBERSHIP

- Life Member -The Indian society for technical education
- Member – Indian Roads Congress

FIELDS OF SPECIALIZATION

- Highway Engineering
- Traffic Engineering
- Transport Planning
- Infrastructure Management
- Road Safety Audit

PROJECTS

Title: Road Safety Auditing of NH-4 Stretch – A Case Study

- The present study was undertaken to audit an existing National Highway (NH-4) between Mumbai and Chennai.
- For analysis a stretch of 27 kilometers was selected which comes under Nelamangala Zone and has high number of accidents as recorded by the Police.
- The study also involved investigating the effects of factors like carriageway width, Relative Accident Rate, Annual Accident Rate and traffic characteristics like traffic volume and mean speed on accident.
- Regression Analysis between Causative Factors and Accident Rate, including Road Safety Audit was carried out for the stretch.

INDUSTRIAL TRAINING

Title: Feasibility study of using pre-cast element technology for construction of Grade Separator at 29th Main BTM Layout Junction

- Organization : TRANSPORT TRAINING INSTITUTE AND CONSULTANCY
- Duration : Three months

PROJECTS UNDERTAKEN

- Conducted "Axial Load Survey" at Devanahalli on NH-207, Bangalore, Karnataka.
- Conducted "Traffic Survey" at Ramakrishna Ashram Circle, Bangalore, Karnataka.
- Conducted several consultancy works in B.M.S.College of Engineering in Highway Engineering Department.

WORK EXPERIENCE

Total Experience: 11 years 05 months

B M S COLLEGE OF ENGINEERING

22nd Sept 14 – Till date

Role: Assistant Professor

Environment: Highway Engineering, Traffic Engineering, Transport Planning

Theory Subject handled for Under Graduate (Civil Engineering)

- Pavement Design
- Building Planning & Drawing
- Geometric Design of Roads
- Building Materials & Testing
- Highway Engineering
- Transportation Systems & Traffic Engineering
- Urban Transport Planning

Theory Subject handled for Post Graduate (Transportation Engineering & Management)

- Geometric Design of Transportation Facilities

Laboratory handled

- Computer Aided Design Laboratory
- Highway Materials Laboratory

Other Activities in the Department

- Website Upgradation
- Placement Co-ordinator
- Time table officer
- CIE Conduction Co-ordinator 2015-16 & 2016-17
- Collection and Compilation of department data for NIRF-MHRD 2016
- Organising Committee Member for National Workshop on "Emerging Trends in Transportation Engineering and Management (NETTEM – 2015)" in association with IITM and Sponsored by Ministry of Urban Development, GOI and TEQIP-II.
- Organising Committee Member for 3rd Conference "Transportation Systems Engineering And Management CTSEM-2016" Sponsored by TEQIP-II

- Worked for PG-NBA-2017

Other Activities in the Institute

- Co-ordinator for Graduation Day 2015, 2016, 2017 & 2018.
- Transportation Co-ordinator for PhaseShift-2015
- Co-ordinator for Teachers' Day 2016
- Valuation Co-ordinator for SEE – 2nd Semester Unit - Worked as Co-ordinator to ensure smooth completion of 2nd Semester valuation and announcement of results in time – 2015-16
- Valuation Co-ordinator for SEE – 7th Semester Unit - Worked as Co-ordinator to ensure smooth completion of 7th Semester valuation and announcement of results in time – 2017-18
- One of the Organising committee member for 5th IEEE International Conference – MITE 2017 held at B.M.S. College of Engineering during 26th to 30th October 2017.
- One of the Co-ordinator for 16th International Conference on "Remote Engineering and Virtual Instrumentation"(REV 2019) held during 3rd to 6th February 2019.

Few Consultancy works in the Department

- Providing Waterproofing to Sri Kantheerava Indoor Stadium, Bengaluru
- Concrete Pavement Panel Design for Road Safety Works On Highway Connecting Kumta With Kadamadagi Road (Sh-48) (A) From 250.00 to 251.00 Km Near Bheemasamudra Village Limit (B) From 252.60 to 253.35 Km In Chitradurga Taluk, Chitradurga District
- REPORT ON THE BENKELMAN BEAM REBOUND DEFLECTION STUDIES FOR CDP ROAD FROM CAPITAL ENTRANCE TO WTC REAR GATE - Submitted to, Bagmane Developers Pvt. Ltd., 8th Floor, A Block, Lake View, Bagmane Tech Park, C.V. Raman Nagar, Bengaluru – 560093
- Carrying out material testing for bituminous and cement concrete pavement materials.
- Prepared Traffic Survey and Analysis Report for Bull Temple Road and Katrigruppe Main Road near B M S College of Engineering, Bangalore.
- Analysis and Report on the Bump Integrator Study For NH-4 Road Section Between Bangalore And Nelamangala In Karnataka.
- Analysis and Report on the Bump Integrator Study For NH-7 Road Section Between Bangalore And Devanahalli In Karnataka.
- Analysis and Report on the Bump Integrator Study for Section NH-17 Between Kundapur To Surathkal In Karnataka
- Analysis and Report on the Bump Integrator Study for Upgradation Of The Road From Manuguli (Km (0+000) - Devapura (Km109+953) Of SH61 In The State Of Karnataka
- Analysis and Report on the Bump Integrator Study for Section NH-17 Between Kundapur To Surathkal In Karnataka

DAYANANDA SAGAR COLLEGE OF ENGINEERING

25th Jan 12 – 20th Sept 14

Role: Assistant Professor

Environment: Highway Engineering, Traffic Engineering, Transport Planning, Infrastructure Management

Theory Subject handled for Under Graduate (Civil Engineering)

- Urban Transport Planning
- Transportation Engineering-I
- Transportation Engineering-II
- Building Planning & Drawing

Theory Subject handled for Post Graduate (Highway Technology)

- Airport Planning & Design Structures
- Road Construction Planning & Management

Laboratory handled

- Computer Aided Design Laboratory
- Concrete And Highway Materials Laboratory

Projects Guided

- **Guided 7** Post Graduate students for thesis work of Master Degree in Transportation Engineering and Management.
- **Guided 8** Post graduate students for thesis work of Master Degree in Highway Technology.
- **Guided 16** Under graduate students for project work of Bachelor of Civil Engineering.

Papers Published

- Modeling Work Trip Mode Choice in Post-Metro Bengaluru City by Dheeraj N. Kumar, Sanjay Kumar S., Parthan K., H. S. Jagadeesh, ECS Transactions, Volume 107, Number 1, 2022.
- A Comprehensive Travel Behaviour Analysis of Working Commuters in Bengaluru City by Dheeraj N. Kumar, Deepika C, Parthan K, H. S. Jagadeesh, International Journal of Civil Engineering by SSRG - IJCE Journal, Volume 9 Issue 2, 2022.
- LABORATORY INVESTIGATIONS ON BITUMINOUS CONCRETE BY PARTIALLY REPLACING NATURAL AGGREGATES (NA) WITH RECYCLED CONCRETE AGGREGATES (RCA) by Dheeraj N. Kumar and Sourabh V. D, 3rd Conference on Transportation Systems Engineering and Management (CTSEM-2016), November 2016.
- Laboratory Investigation of Black Cotton Soil and Red Soil Stabilized with terrasil and cement by Venugopal G & Dheeraj N. Kumar Manjunath K.R, National conference on Recent Advances in Materials Science & its Applications (RAMSA-16), September 2016.
- DENSITY AND COMPACTION CHARACTERISTICS OF WMA USING ADDITIVES by Prof. Dheeraj N Kumar & Varadraj N.K, International Journal of Research in Engineering & Technology (IJERT), eISSN: 2319-1163 | pISSN: 2321-7308, Volume: 03 Issue: 06 | Jun-2014.
- LABORATORY INVESTIGATION ON HOT MIX ASPHALT USING RECLAIMED ASPHALT PAVEMENT (RAP) FOR BITUMINOUS CONCRETE MIX by Prof. Dheeraj N Kumar, Prof. Manjunath K R & Spurti O. Tambake, International Journal of Research in Engineering & Technology (IJERT), eISSN: 2319-1163 | pISSN: 2321-7308, Volume: 03 Issue: 06 | Jun-2014.
- Utilisation of Waste Foundry Sand in Rigid Pavement Structure by Dheeraj N Kumar & Chidananda M.L, International Conference on Convergence of Science, Engineering & Management in Education and Research - A Global Perspective (II Edition) ICCSEM 2013, September 2013.
- Comparative Study On Hot Mix And Warm Mix Asphalt Using Zycosoil And Densicryl Additives For BC Mix by Dheeraj N Kumar, Manjunath K R & Santosh T.K, International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, Vol. 2 Issue 7, July – 2013.

- Road Safety Audit by Dheeraj N Kumar & Arun S Bagi, IOSR Journal of Mechanical and Civil Engineering (IOSRJMCE), ISSN : 2278-1684 Volume 1, Issue 6 (July-August 2012), PP 01-08.

Other Activities

- Web page Up gradation
- Placement Co-ordinator
- Time-table Co-ordinator
- Physical Education and Sports Committee Member from October 2023.
- Participated in the Workshop RART-2012 on 26th & 27th April 2012, organized by Highway Technology Section, Department of Civil Engineering, RV College of Engineering, Bangalore in association with LeeBoy India Construction Equipment(P) Ltd.,
- Participated in a Two-week ISTE Workshop on Introduction to Research Methodologies conducted by Indian Institute of Technology Bombay from 25th June to 04th July 2012. Workshop was held under the National Mission on Education through ICT (MHRD).
- Participated in VTU Intercollegiate State Level Tennis Ball Staff Cricket Tournament - 2014 organised by HKBK College of Engineering on 27th, 28th and 29th January 2014.
- One of the Organising committee member for organising National level workshop on "Emerging Trends in Transportation Engineering and Management (NETTEM – 2015)" in association with Centre of Excellence, Department of Civil Engineering, Indian Institute of Technology–Madras, Chennai, sponsored by Ministry of Urban Development, Government of India, New Delhi and TEQIP – II on 17th April 2015.
- Served as the Faculty Event Coordinator for National Level Annual Tech Symposium, Phase Shift 2016 at B. M. S. College of Engineering on 23rd and 24th of September 2016.
- One of the organising committee member for 3rd conference on Transportation Systems Engineering and Management (CTSEM-2016) sponsored by TEQIP-II, organised by Department of Civil Engineering, B. M. S. College of Engineering, Bengaluru on 24th and 25th November 2016.
- Attended a two-week faculty development program on "Graph Theory - Algorithm and Applications" held during 26.12.2016 to 07.01.2017 organised by the Department of Mathematics, B. M. S. College of Engineering, Bengaluru under TEQIP-II.
- Attended a one-week faculty development program on "Advanced Numerical Techniques for Engineers and Researchers (ANTER - 2017) from 23rd to 28th January 2017.
- Attended One Day Workshop on "Urban Transportation Management" (UTM-2017) held on 11th March 2017 at Hotel Lalith Ashok, Bangalore.
- Attended two-day workshop on "Use of E-Resources for Teaching and Research" on 4th and 5th May 2017 organised by Visvesvaraya Technological University, Belagavi, and B. M. S. College of Engineering, Bengaluru.

- Attended two weeks AICTE-ISTE Short-term Training Programme on "Advances in Finite Element Methods & Applications" jointly organised by the Department of Mechanical Engineering, Department of Civil Engineering and Department of Electrical & Electronics Engineering, B. M. S. College of Engineering, Bengaluru from 17th to 28th July 2017.
- Served as Organising Committee member in "5th IEEE International Conference - MITE 2017" held at B. M. S. College of Engineering, Bengaluru during 26th to 30th October 2017, supported by TEQIP-III.
- Attended Indian Roads Congress – 78th Annual Session at Palace Grounds from 3rd to 6th November 2017.
- Attended QIP Short term course on "Sustainability Issues in Civil Engineering" from 7th to 11th May 2018, conducted by IISc, Bangalore.
- Attended QIP Short term course on "Modelling and Analyzing Sustainable Transport" from 17th December to 21st December 2018, conducted by IISc, Bangalore.
- Worked for the 16th International Conference on "Remote Engineering and Virtual Instrumentation (REV 2019" held from 3rd to 6th February 2019 at B. M. S. College of Engineering, Bengaluru.
- Completed course on "Introduction to Geographic Information Systems" organised by NPTEL faculty development programme of 4-week duration from Jan-Feb 2020.
- Attended Two week course on "Digital Transformation in Teaching Learning Process" from 14th February to 6th March 2020 offered by Indian Institute of Technology Bombay supported by TEQIP-III and funded by the Ministry of HRD, Govt. of India.
- Attended webinar on "Human Centered Design and Innovative Problem Solving Techniques in Engineering" held on 11th May 2020 in association with IEEE Student Branch of Rajadhani Institute of Engineering and Technology, Trivandrum.
- Attended online webinar on "Salient Aspects in Bituminous Pavement Construction" on 5th June 2020, organised by Indian Concrete Institute-Bangalore Centre.
- Attended Three Day webinar on "Sustainable Construction" from 11th to 13th June 2020, organised by IGBC - STUDENT CHAPTER, Department of Civil Engineering, B. M. S. College of Engineering, Bengaluru.
- Attended a course on "OnLine Teaching" from July to September 2020 conducted by the Indo-Universal Collaboration for Engineering Education (IUCEE) Team of Faculty.
- Completed course on "Introduction to Multimodal Urban Transportation Systems (MUTS)" organised by NPTEL-AICTE faculty development programme of 12 week duration from Sep-Dec 2020.
- Attended two-day online workshop on "Virtual Lab Conduction" in association with Virtual Lab of NITK Surathkal, Mangalore held on 23rd and 24th November 2020 at B. M. S. College of Engineering, Bengaluru.

- Attended AICTE-ISTE sponsored one-week online Refresher programme (Series-II) on "Recent practices in Design and Construction of Flexible and Rigid Pavements" conducted by the Department of Civil Engineering, PDA College of Engineering, Kalaburagi from 18th to 23d March 2021.
- Completed "15-Days Road Safety Auditors Certification Course" from 24th April 2021 to 8th May 2021 organised at MNIT Jaipur, as per the Memorandum of Understanding signed between MoRT&H, IRC and MNIT Jaipur.
- Coordinator for Two Days Hands-on Workshop on "MS Word, Excel and PowerPoint: For Technical Papers, Thesis, and Documentation" conducted by Department of Chemical Engineering and Department of Civil Engineering, B. M. S. College of Engineering, Bengaluru.

TRANSPORTECH CONSULTANTS

01st Oct 09 – 24th Jan 12

Role: Project Assistant

RESPONSIBILITIES

- Conducted land surveys, establishing Bench Marks, Contour Mapping and Preparation of Strip Plans with Sectional Details using Computer Aided Designs (Auto Cad) for Engineering Projects.
- Conducted traffic surveys for mid blocks, junctions on Rural and Urban Roads and prepared project reports.
- Conducted Pavement evaluation studies inclusive of Benkelman Beam Deflection Studies to evaluate the overlay thickness required for existing pavements; in addition conducted Bump Integrator Studies to evaluate the road unevenness, Axle Load Studies to evaluate the Vehicle Damage Factor(VDF)

DHV BV – DHV India Pvt. Ltd

01st June 07 – 31st Oct 07

Role: Junior Design Engineer.

RESPONSIBILITIES

- Worked for Karnataka Municipal Reforms Project under World Bank funded.
- Greater Bangalore Sewerage Component and Road Restoration System.
- Involved in preparing Design and Detailed Project Report (DDPR) of sewerage system for Byatarayanapura and Rajarajeshwari Nagar CMCs.

DESIGN CONSORTIUM

01st July 06 – 31st May 07

Role: Engineer

RESPONSIBILITIES

- Designed and prepared drawings for residential buildings.
- Involved in preparing estimates for Pradhana Mantri Gram Sadak Yojana (PMGSY) projects, pavement, and culvert and curve design calculations.
- Worked for Jalnirmal projects, designing water supply schemes and handling estimates using Loop software.

PERSONAL PROFILE

Name : **Dheeraj N Kumar**

Father Name : **Late M Narendra Kumar**
Mother Name : **Jayanthi N Kumar**
Date of Birth : **11th April 1985**
Sex : **Male**
Nationality : **Indian**

I hereby declare that all the information given above is true to the best of my knowledge.

Place: Bengaluru

Date: 11.09.2024

Yours Sincerely,

(DHEERAJ.N.KUMAR)