Name: Dr. Naveen Kumar. C

Designation: Associate Professor Department: Department of civil engineering Mail I'd: naveenkumar\_c@vnrvjiet.in

Others (Consultancy

Experience (in years): 16years ; Teaching: 3years; Research: 6 years; Design Works): 11 years

#### 1. Educational / Technical qualifications:

S. No	Level (UG / PG / Ph. D)	Year of passing	Specialization
1	B. Tech.	2003	Civil Engineering
2		2005	Traffic and
	M. Tech.		Transportation
			Engineering
3	Ph. D.	Sept, 2017	Road Safety Analysis

## 2. Teaching and Learning:

2.1. Teaching Interests: UG: Transportation Engineering, Traffic Engineering, Geotechnical Engineering, Building materials, Estimation and Costing, Geographic Information Systems. Transportation Engineering Laboratory and Surveying Field Work Laboratory PG: Road Safety and Traffic Management, Pavement Management Systems, Computational Techniques and Highway Engineering, Pavement Analysis and Design, Urban Transportation Planning, Highway Geometric Design, Traffic Engineering, Advanced Traffic Analysis. Highway Numerical Analysis lab.

# 2.2 Novel Teaching & Learning Techniques adopted:

- Use of NPTEL to understand the subject better through e-learning.
- Maximum utilization of resources like text books, PowerPoint presentations etc. to update the knowledge database is also used.
- WIT and WIL, NPTEL, TED Videos
- PPTs. Black board teaching,
- 2.2. Involvement in curriculum updating / Design:

Designed syllabus for the M.Tech subjects like-

- Road Safety and Traffic Management
- Computational Techniques in Highway Engineering
- Numerical Methods and Applied Statistics
- Highway Network Analysis and Optimisation Techniques
- Mass Transportation System and Planning
- Numerical Analysis Laboratory

• Smart Cities

### 3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Learning new software related to Transportation, Statistical analysis coding.

- 3.2. CCA/ECA Organized:
  - Department Coordinator for OPEN HOUSE
  - Technical paper presentation reviewer CONVERGENCE 2K18
  - Technical paper presentation reviewer Symposium HORIZON-19.
- 3.3. CCA/ECA participated:
- 3.4. Counseling and Mentoring Activity:

Counsellor for I and IV B. Tech Students (20 Students)

3.5. Committees involved in:

Department level: Consultancy Committee

Lab In-charge - CAD Laboratory

Institute Level:

#### 4. Conference / Workshop / Seminar / Guest Lectures :

- 4.1 Conducted:
- 4.2 Attended: 12 International Conferences, 8 Workshops, 9 Guest Lectures and 5 National Conferences.

## 5. Academic Contribution and Research & Consultancy:

- 5.1. Invited Lectures: 5 Nos.
- 5.2. Articles / Chapters published in Books:
- 5.3. Books published as single author or as editor:
- 5.4. Projects Guided :
  - a) UG: Guided 12 B. Tech Students
  - b) PG: Guiding 12 M. Tech Projects
- 5.5. Research Interests: Bayesian Statistical analysis of traffic crashes, Traffic simulation and modelling,

Pedestrian modelling, Pavement performance analysis, Object detection using RCNN.

- 5.6. Ph.D students :
  - a) Enrolled :
  - b) Submitted :
  - c) Awarded :

5.7. Papers published in reviewed journals :	5.7. Papers	published	in reviewed	journals :
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S.No	Title of the Paper	Journal Name Vol. No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Identifying Safety Factors Associated with Crash Frequency and Severity on Non-Urban Four Lane Highway Stretch in India.	Journal of Transportation Safety & Security, Taylor & Francis, Vol. 9 (1), 2017, pp. 6-32.		Scopus Indexed	International
2	Calibration of safety performance function for crashes on inter- city four lane highways in India.	<b>Cogent</b> <b>Engineering</b> , Taylor & Francis, Vol. 2 (1), 2015. (open access).		Scopus Indexed	International

# 5.8. Papers presented at National / International Journals:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Poisson Family Regression Techniques for Prediction of Crash Counts using Bayesian Inference" has been published at the	2nd Conference of Transportation Research Group of India (CTRG), December 12 - 15, 2013, Agra, India.	International	
2	Crash Prediction for Multilane Highway Stretch in India" has been published at the	10th International Conference of Eastern Asia Society for Transportation Studies, September 9-12, 2013, Taipei, Taiwan.	International	
3	Predicting Road Traffic Crashes on Interurban National Highways by Statistical and Artificial Computing Techniques" has been published at the	International Conference on Transportation Planning and Implementation Methodologies for Developing Countries – 10th TPMDC, December	International	

		12 - 14, 2012,	
4	Improving Highway Safety with Intelligent Transportation Systems" has been published in the proceedings of	Mumbai, India. 7th IRF Regional Conference - Road Safety in Urban and Rural Roads, November 1-2, 2012, New Delhi, India.	International
5	Neural Network Paradigms in Crash Modelling on Non-Urban Highways in India" has been published at the	10th World Congress on Computational Mechanics during July 8-13th, 2012 in Sao Paulo, Brazil.	International
6	Road Traffic Crash Prediction on Inter-Urban National Highways" has been published at the	International Conference on Advances in Architecture and Civil Engineering AARCV 2012, June 21 - 23, 2012, Bangalore, India.	International
7	Road Traffic Safety (RTS) Study on Non-Urban National Highways in India" has been accepted & presented for the	International Conference on Highway Engineering 2012 held during April 18-20th, 2012 in Bangkok, Thailand.	International
8	Accident Data Handling Issues for Road Traffic Safety Research" has been published in the Souvenir published by CRRI on the occasion of	'National Get- together (NGT- 2012) on Road Research and its Utilisation' during March 1st and 2nd, 2012 at New Delhi, India.	National
9	Safety Implications of Geometric Design Standards for Non-Urban Highways" has been accepted for the International Seminar on	6th IRF Regional Conference, Road Safety Strategy in India – Action Plan, 3 – 5 October 2011, New Delhi, India.	International

10	Methodology for Road Traffic Safety Study on Non–Urban Highways in India" has been accepted & presented for the	An Highways in India" has esented for the ctors associated by on rural Four Lane Road Development Strategies & Road Safety on Improved Highways, 14 – 19 March 2011, New Delhi, India. 4th International Chinese European Workshop (CEW 2016) Delft	
11	Recognising risk factors associated with crash frequency on rural Four Lane Highways" has been accepted & presented for the		
12	Crash Frequency Prediction models and Development of Crash Modification Factors for Four Lane Highways in India." has been accepted for the proceedings of	18th IRF World Road Meeting (WRM 2017) Conference, 14-17 November 2017, New Delhi, India.	International
13	Bayesian Crash Prediction Models for Non- urban Four Lane Highways in India	28 <sup>th</sup> Canadian Association for Road Safety Professionals (CARSP) Conference – 2018.	International
14	Pedestrian Delay Modelling using Vissim at Mid Block Section and Intersections on Urban Roads	Indian Highways IRC Journal	National
15	CHARACTERISTICS OF LABORATORY PRODUCED HARD GRADE BITUMEN WITH GILSONITE MODIFICATION	Materials Today: Proceedings	International
16	A Novel Technique to Design Optimum Bituminous Mix Designs Based on R Studio and Autograph with Integration	Materials Today: Proceedings	International
17	Applying Support Vector Classifiers for Analysis of Pedestrian-Vehicular Conflicts at Unsignalized Crosswalk	2019 IEEE 16th India Council International Conference (INDICON)	International
18	Short-Term Traffic Prediction Using Sarima and FbPROPHET	2019 IEEE 16th India Council International	International

		Conference (INDICON)	
19	Determination of Level-of-Service for Public Transport: A Case Study for Hyderabad Metro	Advances in Civil Engineering	International
20	A Study of Dynamic Traffic Assignment Using Statistical Method for Urban Scenario	Recent Developments in Sustainable Infrastructure	International
21	Performance evaluation of HMAC mixes produced with gilsonite modified bitumen for heavily trafficked roads	Materials Today: Proceedings	International
22	ANN based Study to Investigate the Parameters Influencing Collision Type on a Four Lane Divided National Highway	2020 Fourth International Conference on I- SMAC (IoT in Social	International
23	Analysis of Urban Traffic Bottleneck in Hyderabad city using Machine Learning Techniques	2020 Fourth International Conference on I- SMAC (IoT in Social	International
24	Application of Machine Learning Techniques in Delay Modelling for Heterogenous Signalized Intersections	2020 Fourth International Conference on I- SMAC (IoT in Social	International
25	Predicting driver's decision-making behaviour in Amber phase using ML techniques	2020 Fourth International Conference on I- SMAC (IoT in Social	International
26	Short Term Predictions of Traffic Flow Characteristics using ML Techniques	2020 4th International Conference on Electronics, Communication and Aerospace Technology (ICECA)	International
27	Damage detection of structural members using internet of things (IoT) paradigm	Materials Today: Proceedings	International

# 5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed
1	Road Safety Audit of	AECOM India Pvt.	2019 to	Rs, 27,00,000/-	Ongoing
	Belgaum Khanapur	Ltd.	2022		
	National Highway				

- 6. Awards / Honours received: Scored 757 rank in GATE 2003, MHRD Scholarship, IRC 2011 Research Paper Award.
- 7. Motto: To guide the future professionals and to build our Nation with qualitative research works.