

## Malathi Narra



Designation : Senior Assistant ProfessorE-Mail ID : malathi@vrsiddhartha.ac.in

**Contact at** : #225, Department of Civil Engineering,

Siddhartha Academy of Higher Education, Kanuru, Vijayawada, Andhra Pradesh 520007.

#### Education

Ph. D,Osmania University,Hyderabad,Telangana M.Tech (Transportation Engineering)

2000, Jawaharlal Nehru Technological University, Hyderabad

**B.Tech (Civil Engineering)** 

1998, Natinal Institute of Technology, Warangal.

## **Teaching Experience & Industrial Experience 25 YEARS**

Period	Designation	Institution / Organization		
August	Senior Assistant	Velagapudi Ramakrishna School of Engineering		
25-till	Professor	SAHE,Vijayawada		
date				
2016-2025	Assistant Professor	Velagapudi Ramakrishna School of Engineering ,SAHE		
2014-2016	Assistant Professor	BV Raju Institute of Technology, Narsapur, Medak		
2012-2014	Associate Professor	MallaReddy Institute of Technology and science		
2010-2012	Assistant Professor	CMR Technical Campus, Kandlakoya, Medchal		
2007-2010	Assistant Professor	TRR College of Engineering, Patancheru		
2003-2007	Sr Photogrammetrist	IIC Technologies, Jublee Hills , Hyderabad		
	and GIS Analyst			
2001-2003	Jr Photogrammetrist	NRSC Premises, Navayuga Pvt Ltd, Hyderabad		
	and GIS Analyst			

### **Courses Taught**

- Transportation Engineering
- Pavement Design

- Traffic Engineering
- Urban Transportion Planning
- Geospatial Technologies
- Disaster Management and Mitigation
- Railway Engineering Airport Engineering, Docks and harbor Engineering, Tunnel Engineering
- Pavement Maintenance and Management
- Construction Technology and Project Management
- Highway Safety
- Fluid Mechanics
- Hydraulics and Hydraulic Machinery
- Remote Sensing and GIS
- Building Materials and Building Construction

### **Research Interests**

#### **Broad Area of Research:**

Transportation Planning and Traffic Signal Control Systems, LOS Concept, Driver and Pedestrian Behaviour on Indian context, Accident Analysis and Mitigation Measures, Pavement Analysis and Design, Pavement Subgrade Material Characterization, Urban Transportation Planning.

#### **Honors and Awards**

### • Session Chair

Chair of the session A5-S3:

Road traffic behavior, in the 16th world conference on transport research, in Montreal, Canada, from July 17 to 21.

• NOMINEE---FICCI ROAD SAFETY AWARDS On Best Project work on Accident Analysis for Vijayawada city.

### **Research Profile**

### **Publications**

The recent publications and research contributions can be viewed from the following URLs

S.No.	Index In	Title of the Paper	Status of Author	Name of the Journal,Vol,Page Nos
1	SCI	A NOVEL OPTIMIZED IN- TELLIGENT GREEN SIG- NAL TIMING SYSTEM FOR URBAN CORRIDOR	First Author	CONCURRENCY AND COMPU- TATION ,WILEY PUBLICA- TIONSVOLUME 34 ISSUE26
2	SCOPUS	GEOTECHNICAL CHARACTER- ISTICS OF POLYPROPYLENE MACRO FIBRE REINFORCED	First Author	IOP CONFERENCE SERIES: EARTH AND ENVIRONMEN- TAL SCIENCE

		BLACK COTTON SOIL TREATED W		
3	SCOPUS	A HYBRID MACHINE LEARN- ING APPROACH FOR PERFORM- ING PREDICTIVE ANALYTICS ON ROAD ACCIDENTS	Fourth Author	6TH IEEE INTERNATIONAL CONFERENCE ON COMPU- TATIONAL SYSTEM AND IN- FORMATION TECHNOLOGY FOR SUSTAINABLE SOLU- TIONS
4	SCOPUS	AI ENABLED ACCIDENT BLACK SPOT ALERTING MO- BILE SYSTEM TO ENHANCE ROAD SAFETY USING GMM- SVM	fourth Author	JISAE, 2023, 11(4), 734–742
5	SCOPUS	PERFORMANCE BASED CONGESTION CONTROL USING VIDEO GRAPHIC VOLUME COUNT FOR AN UNCONTROLLED INTERS	First Author	(IJITEE) ISSN: 2278-3075, VOLUME-8 ISSUE-2S DE- CEMBER, 2018
6	SCOPUS	IMPACT OF CLIMATE CHANGE ON WATER RESOURCE ENGI- NEERING IN TRINIDAD AND TOBAGO	second Author	LARHYSS JOURNAL, ISSN 1112-3680, N°55, SEPT 2023, PP. 215-229
7	SCIE	ADVANCING GIS MAP MAINTENANCE: CHANGE DE- TECTION AND UPDATE USING RESU-NET: A CASE STUDY ON CHAN	third Author	CURRENT SCIENCE, VOL- UME 125, ISSUE 10
8	UGC-CARE	REVIEW OF THE FUZZY LOGIC BASED APPROACH IN TRAFFIC SIGNAL CONTROL	First Author	THE INTERNATIONAL JOURNAL OF ANALYTICAL AND EXPERIMENTAL MODAL ANALYSIS VOLUME XIV, ISSUE I, JA
9	WEB OF SCIENCE	COMPARATIVE STUDY ON AS- PHALT MIXTURE WITH NANO MATERIALS AND POLYMER	First Author	IOP CONFERENCE SE- RIES,IOP CONF. SER.: MA- TER. SCI. ENG. 1112 012019
10	WEB OF SCIENCE	STABILIZATION OF EXPAN- SIVE SOIL BY USING LIME AND REINFORCEMENT WITH GEO- TEXTILE	First Author	IOP CONFERENCE SE- RIES,MATERIAL SCIENCE AND ENGINEERING
11	WEB OF SCIENCE	TRAFFIC CONGESTION AND SPEED DELAYS AT BENZ CIRCLE, VIJAYAWADA DUE TO CONSTRUCTION	First Author	IJET, ICSSC VRSEC 2017
		ACTIVITIES",		
12	WEB OF SCIENCE	STABILIZATION OF EXPANSIVE SOIL BY USING LIME AND REINFORCEMENT WITH GEOTEXTILE	First Author	IOP CONFERENCE SE- RIES,IOP CONF. SER.: MA- TER. SCI. ENG. 1112 012019
13	SCOPUS	EFFICIENT METHOD OF RE- GENERATION OF ENERGY FROM SPEED BREAKER" IJI- TEE JAN 2020	First Author	INTERNATIONAL JOURNAL OF INNOVATIVE TECHNOLOGY AND EXPLORING ENGINEER- ING (IJITEE) ISSN: 2278-307

14	SCOPUS	PEDESTRIAN GAP AC- CEPTANCE BEHAVIOUR AT UNCONTROLLED INTERSEC- TIONS FOR AN URBAN COR- RIDOR VIJAYAWA	First Author	INTERNATIONAL JOURNAL OF INNOVATIVE TECHNOLOGY AND EXPLORING ENGINEER- ING (IJITEE) ISSN: 2278-307
15	WEB OF SCIENCE	STRENGTHENING OF FLEXI- BLE PAVEMENT BY ADDING RECRON FIBRE	First Author	IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING, VOLUME 1112,
16	SCOPUS	REDUCTION OF DELAYS AT ISOLATED SIGNALIZED INTERSECTION USING NOVEL GOLDEN EAGLE BASED FUZZY SIGNAL CONTROLLER	First Author	SCIENCE DIRECT ELSE- VIER –TRANSPORT RE- SEARCH PROCEDIA VOLUME 82,2025,PAGES 3752-3767
17	SCOPUS	EVALUATING BITUMEN MIX WITH A BLEND OF RHA AND SYN- THETIC MATERIAL: A COMPARI- TIVE PERSPECTIVE	First Author	SPRINGER-DOI: 10.1007/978-3-031-73820-3_8 ADVANCES IN ENVIRONMENTAL SUSTAINABILITY, ENERGY AND EARTH SCIENCE
18	SCOPUS	INNOVATIVE SOLUTIONS FOR AGRI- CULTURE:SENSOR DRIVEN SOIL PA- RAMETER MONITORING AND DEEP LEARNING IN POTATO DISEASE DE- TECTION	First Author	INTERNATIONAL JOURNAL OF RECENT AND INNOVA- TION TRENDS IN COMPU- TING AND COMMUNICA- TION, ISSN: 2321-8169 Vol- ume: 11 Issue: 9
19	SCOPUS	REDEFINING SUSTAINABILITY IN BUILDING PRACTICES IN CIRCULAR CONSTRUCTION PROCESS	First Author	INNOVATIONS IN ENERGY EFFICIENT CONSTRUCTION THROUGH SUSTAINABLE MATERIALS-ADVANCES IN CHEMICAL AND MATERIALS BOOK SERIES- IGI GLOBAL PUBLISHING
20	SCOPUS	APPLICATION OF GOOGLE EARTH ENGINE NDVI TREND TO STUDY YIELD OF SUGARCANE CROP USING SENTINEL 2 DATA	First Author	NAVIGATING USABILITY AND USER EXPERIENCE IN MULTI PLATFORM WORLD IGI GLOBAL PUBLISHING BOOK SERIES
21	SCOPUS	PERFORMANCE BASED EVALUATION ON STRENGTHENING OF FLEX- IBLE PAVEMENT USING SBR AND RICE HUSK ASH AS FILLER MATERIAL.	Third Author	INTERNATIONAL CONFERENCE ON MATERIALS INNOVATION AND SUSTAINABLE INFRASTRUCTURE JOURNAL OF PHYSICS: CONFERENCE SERIES 2779 (2024) 012022 IOP PUBLISHING DOI:10.1088/1742-6596/2779/1/012022
22	SCI	EXPLORING THE COMBINED EFFECTS OF HYDROGEN AND MULTIWALLED CARBON NANOTUBES ON THE PERFORMANCE, EMISSIONS, AND COMBUSTION CHARACTERISTICS OF A DIESEL	Fourth Author	ENERGY SCIENCE & ENGINEERING, 2025; 1–18 1 HTTPS://DOI.ORG/10.1002/ESE3. 70277

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# **Recognized Research Supervisor**

S.No.	Department	University
01.	Civil Engineering Department	VRSSE, Siddhartha Academy of Higher Education

# **Funded Research Projects**

S.No.	Type	Title	Status	Funding Agency	Amount (INR)	Duration
01.	Funded	Updatin g very large scale urban GIS maps using Deep learning Techniq ues	On-Going	ISRO-NRSC	17.84 Lakhs	2 Years

Abroad/International Conference Papers Presen and Published	july 2023, Reduction of Delays at Isolated Signalized Intersection using Novel Golden Eagle-Based Fuzzy Signal Controller.		
	2.The 3rd International Symposium on Multimodal Transportation Dec 06 – Dec 07, 2019. NUS, Singapore." Review of the Fuzzy Logic Based approach in Traffic Signal Control Prospects in south India"		
Google Scholar	https://www.google.scholar.co.in/citations?/user Malathi Narra		
Scopus	https://www.scopus.com/ <b>DOI: 10.35940/ijitee.C1006.01935220</b>		
ORCID	https://orcid.org/ <u>0000-0002-6076-1464</u>		
Research Gate	https://www.researchgate.net/profile/malathi-narra DOI: 10.14419/ijet.v7i2.1.11047		
LinkedIn	https://in.linkedin.com/in/malathi-narra-b152b790		

Reviewer	International Journal of Transportation Engineering and Technology.

### **Administrative Roles**

S.No.	Role	Institution	Duration	Responsibilities
1	Convenor	VRSSE	2023-Present	Student Council

# **Certifications/MOOC Courses Completed**

S.No.	Title	Platform	Duration	Year
1.	Research writing	NPTEL	8WEEKS	2017

## **Patents**

S.No	Title	Status	Application No.	Year
1.	Development of Machine learning Methods to predict compressive strength of concrete	Published	20232102255	2022
2.	Dynamic monitoring of bridge scour Under heavy water flow	Published	20234101100	2024

## Ph.D

Registered	01
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## **Invited Talks**

No. of Invited Talks 02
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# **Professional Development Activities - Participations**

Faculty Development and Training Programmes	10
(at least 5 Days)	
International / National Level Seminars	00 / 12
International / National Level Conferences	02 / 15
Workshops	14
Instructor Led / Self-Paced Courses	6
Webinars	8

## **Professional Bodies Membership Details**

LM36683	Indian Roads Congress(IRC)
LM67180	Indian Society for Technical Education (ISTE)
LM9850	Indian Concrete Institute(ICI)
LM20152	Transportation Research Group

Dr.Malathi Narra

(Your Name & Signature with Date)

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