

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

Curriculum Vitae



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|-------------------------------------|---|
| 1. Name | Dr. S. MOSES SANTHAKUMAR |
| 2. Designation: | Professor |
| 3. Office Address: | Dept. of Civil Engineering |
| 4. Telephone (Direct) : | +91-431-2503155 |
| Telephone (Extn) : | 3155 |
| Mobile : | +91-9842450011 |
| 5. Email (Primary) : moses@nitt.edu | Email (Secondary) : s_moses@rediffmail.com |
| 6. Field of Specialization: | Transportation Engineering |
| 7. Employment Profile : | |

| Job Title | Employer | From | To |
|---------------------|---|----------|-----------|
| Professor | National Institute of Technology, Tiruchirappalli | 03.02.99 | Till date |
| Assistant Professor | Regional Engineering College, Tiruchirappalli | 19.05.92 | 02.02.99 |
| Lecturer | Regional Engineering College, Tiruchirappalli | 09.09.88 | 18.05.92 |
| Sr. Project Officer | Indian Institute of Technology, Madras | Sep.86 | Sep.88 |
| Project Associate | Indian Institute of Technology, Madras | Jan.84 | Jan.86 |

8. Academic Qualifications (From Highest Degree to High School) :

| Degree | Board / University | Year | Grade | Subjects |
|----------|--|------|--------|---------------------|
| Ph.D. | Indian Institute of Technology, Madras | 1988 | | Transportation Eng. |
| M.Tech. | Indian Institute of Technology, Madras | 1981 | 8.42 | Transportation Eng. |
| B.Tech. | Indian Institute of Technology, Madras | 1979 | 7.58 | Civil Engineering |
| P.U.C. | Madurai Kamarajar University | 1974 | 82.5 % | |
| S.S.L.C. | Directorate of School Education | 1973 | 87.2 % | |

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9. Academic/Administrative Responsibilities within the University :

| Position | Faculty/Department/Centre/Institution | From | To |
|---|---------------------------------------|------|---------|
| Head of the Centre of Excellence in Transportation Engineering (CETransE) | Department of Civil Eng., NITT | 2013 | 2016 |
| Registrar (i/c) | NITT | 2012 | 1 month |
| Head of the Department | Department of Civil Eng., NITT | 2009 | 2012 |
| Dean, IC&SR | NITT | 2007 | 2008 |
| Dean, Students | NITT | 2006 | 2007 |
| Controller of Examinations | RECT | 2002 | 2006 |
| Staff Adviser, Civil Engineering Association | Department of Civil Eng., RECT | 2000 | 2001 |
| Editor, RECORD & LANCER | RECT | 1998 | 2002 |
| Convener, Sports Committee | RECT | 1996 | 1998 |
| M.Tech. (TEM) Course Coordinator | Department of Civil Eng., RECT | 1995 | 2015 |
| Adviser, Staff Recreation Club | RECT | 1995 | 1996 |
| Hostel Warden | RECT | 1990 | 1995 |
| Computer Laboratory in-charge | Department of Civil Eng., RECT | 1989 | 2009 |

10. Academic/Administrative Responsibilities outside the University :

| Position | Institution | From | To |
|--|--|------|-----------|
| Co-ordinator, State Technical Agency (STA) | Pradhan Mantri Grama Sadak Yojana (PMGSY) Scheme, NRRDA, GoI | 2000 | Till date |
| Developer, RAPID (Rural Action Plan Integrated Database) Computer Software | Directorate of Rural Development, DRDAs and Collectorates | 1998 | Till date |

11. Awards, Associateships etc. :

| Year of Award | Name of the Award | Awarding Organization |
|---------------|-------------------|-----------------------|
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12. Fellowships :

| Year of Award | | Awarding Organization | From (Month/Year) | To (Month/Year) |
|---------------|--|-----------------------|-------------------|-----------------|
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13. Details of Academic Work :

(i) Curriculum Development

CE312 CAD I and CE407 CAD II were newly introduced into the curriculum of B. Tech. (Civil Engineering). The concept of teaching Civil Engineering applications of Numerical Techniques was implemented successfully.

The concept of unified CAD in Civil Engineering for the three M.Tech. streams was developed. Later the course content for CE 608 CAD in Transportation Engineering for the M. Tech. (Transportation Engineering and Management) was evolved.

Formulated the CE607 Computer Simulation Applications in Transportation Engineering course at the PG level by introducing hands-on exercises in GPSS simulation language. The course was later modified as [CE612](#) Computational Techniques in Transportation Engineering by adding modules in ANN and GA.

CE609 Traffic and Pavement Engineering Laboratory for M. Tech. (Transportation Engineering and Management) was developed by introducing Traffic Survey exercises into the erstwhile Highway Engineering syllabus.

(ii) Courses taught at Postgraduate and Undergraduate levels

Postgraduate

CE601 Highway Traffic Analysis and Design
CE602 Road Transport Management and Economics
CE604 Transportation Planning
CE609 Traffic and Pavement Engineering Laboratory
CE610 CAD in Transportation Engineering
CE611 Theory of Traffic Flow
[CE612](#) Computational Techniques in Transportation Engineering
CE613 Intelligent Transportation Systems
CE617 Transportation Network Analysis and Optimization
CE819 Highway Design and Safety

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Undergraduate

BE102 Basic Civil Engineering
BS102 Introduction to Civil Engineering
CE312 Computational Laboratory - I
CE403 Transportation Engineering – II
CE407 Computational Laboratory – II
CE471 Transportation Planning

(iii) Projects guided at Postgraduate level

Seventy two theses in Computer Simulation, ITS, Expert Systems,
Network Analysis and GIS

(iv) Other contributions

Under the MHRD Project on ‘Strengthening of the Transportation Engineering Laboratory’, purchased and installed Transportation Engineering equipment including the Marksman 600 Automatic Traffic Data Acquisition System.

Was involved in setting up the modernised Transportation Engineering Laboratory through TEQIP.

As Computer Laboratory in-charge for 20 years, created the Departmental Computer Centre and the Computer Centre Annexe. Modern computers were purchased and installed for the use of UG, PG and PhD scholars. **The Department of Civil Engineering became the first Department in NITT to provide computing facilities in the rooms of all faculty members.**

Software such as VISSIM, NISA, STAAD, GT-STRUDL, MxRoad, Intergraph, GPSS, PC_ArcInfo, Visual Modflow, etc were acquired.

Under the AICTE Project on ‘Multimedia Tools for Teaching of Civil Engineering’, development of Multimedia-based Teaching Modules for Civil Engineering Education was initiated.

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14. Details of Major R&D Projects :

| Title of Project | Funding Agency | Duration | | Status |
|--|---|----------|------|-----------------------|
| | | From | To | Ongoing/ Completed |
| Centre of Excellence in Transportation Engineering (CETransE) | Ministry of Human Resources Development, GoI | 2013 | 2017 | Ongoing |
| Pavement Performance Studies on Coir Geotextiles Reinforced Rural Roads in Tamilnadu | Coir Board, Ministry of MSME, GoI | 2014 | 2017 | Ongoing |
| Pavement Evaluation Studies on the Performance Enhancer RBI Grade 81 | M/s. Maarvel Touchnology Pvt. Ltd. | 2013 | 2017 | Ongoing |
| Urban Speed Management using ITS | Ministry of Urban Development and Indian Institute of Technology, Madras, Chennai | 2010 | 2015 | Completed |
| Coir Geotextiles Reinforced Low Volume Rural Road Pavement Performance Studies in Tamilnadu and Puducherry | Coir Board, Ministry of MSME, GoI | 2011 | 2014 | Completed |
| Preparation of State of the Art Report on Facilities for Pedestrians/Physically Challenged Persons/ Passengers | Ministry of Road Transport and Highways, GoI | 2012 | 2014 | Completed |
| Preparation of State of the Art Report on Road Safety with Emphasis on Non-Motorised Traffic | Ministry of Road Transport and Highways, GoI | 2012 | 2014 | Completed |
| Rural Road Traffic Volume Study in Tamilnadu | National Rural Roads Development Agency, GoI | 2010 | 2012 | Completed |
| Rural Road Pavement Performance Study (RRPPS) | National Rural Roads Development Agency, GoI | 2010 | 2012 | Completed |
| GIS-GPS Based Monitoring of Public Transport Vehicles | Ministry of Human Resources Development, GoI | 2000 | 2002 | Completed |
| Household Survey to Assess Rural Transport Infrastructure | IIM, Bangalore | 1999 | 2000 | Completed |

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|--|--|------|------|-----------|
| Strengthening of Transportation Engineering Laboratory through Plan Fund | Ministry of Human Resources Development, GoI | 1998 | 1999 | Completed |
| Multimedia Tools for Teaching of Civil Engineering | AICTE, GoI | 1995 | 1998 | Completed |

15. Number of PhDs guided :

| Name of the PhD Scholar | Title of PhD Thesis | Role (Supervisor/ Co-Supervisor) | Year of Award |
|-------------------------|---|----------------------------------|---------------|
| P. Partheeban | Evaluation of Transportation System Management Techniques using GIS | Supervisor | 2003 |
| R. Vidya | Study of Impact of Work Zones using Simulation | Supervisor | 2015 |

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools :

| Date (s) | Title of Activity | Level of Event (International/ National/ Local) | Role (Participant/ Speaker/ Chairperson / Paper presenter) | Event Organized by | Venue |
|------------|--|---|--|--|---------------|
| 19/07/2016 | Regional Review Meeting under PMGSY | National | Speaker | NRRDA | Bangalore |
| 30/06/2015 | Regional Review Meeting under PMGSY | National | Speaker | NRRDA | Bangalore |
| 30/10/2014 | PMGSY Workshop on Alternate Technologies and Materials | National | Speaker | Department of Civil Engineering, NIT, Warangal | NIT, Warangal |
| 29/10/2014 | Regional Review Meeting under PMGSY | National | Speaker | NRRDA | Hyderabad |

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|----------------|---|---------------|-------------|---|-----------------|
| 22-24/08/2014 | Workshop on Non-conventional Materials and Technologies under PMGSY | National | Participant | Department of Civil Engineering, IIT Bhubaneswar | IIT Bhubaneswar |
| 09-10/12/2013 | Workshop on Intelligent Transportation Systems | International | Participant | Department of Civil Engineering, IIT Madras | IIT Madras |
| 23/09/2013 | Workshop on Construction of Concrete Roads and Overlays | National | Participant | Department of Civil Engineering, IIT Madras | IIT Madras |
| 15-16/02/ 2013 | Workshop on Using Science and Data in Road Safety Management | National | Participant | Centre of Excellence in Urban Transport, Dept. of Civil Engineering, IIT Madras | IIT Madras |
| 04/01/2013 | Regional Review Meeting under PMGSY | National | Speaker | NRRDA | Bangalore |
| 13-14/07/ 2012 | National Conference on Urban Mobility - Challenges, Solutions and Prospects | National | Participant | Department of Civil Engineering, IIT Madras | IIT Madras |
| 13/08/ 2010 | Workshop on Urban Transport Challenges and Solutions | National | Participant | Department of Civil Engineering, IIT Madras | IIT Madras |
| 17/07/ 2010 | Regional Awareness Conference, Water Convention 2011 | National | Participant | Indian Water Works Association (IWWA) | Trichy |
| 10-11/03/2010 | National Conference on TRENds and Advances in Transportation Engineering (TREAT-2010) | National | Participant | Bangalore University | Bangalore |

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|---------------|---|----------|-------------|---|--------------------------|
| 02-04/10/2008 | TEQIP workshop on the Seven Habits of highly effective people | Local | Participant | NITT | Munnar, Kerala |
| 22-24/05/2007 | National Conference and Exposition of Rural Roads | National | Participant | NRRDA | Vigyan Bhawan, New Delhi |
| 22-23/03/2007 | National Conference on Earthquake and Transportation Engineering | National | Speaker | Sona College of Technology, Salem | Salem |
| 06/03/2007 | Workshop on Vehicle Tracking using GPS and GIS | National | Speaker | IRTT, Erode | Erode |
| 21-22/11/2006 | National conference on GIS, GPS and RS Applications in Transportation Planning and Management | National | Speaker | St. Peter's College of Engineering, Chennai | Chennai |

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor) :

| Title of Activity | Level of Event (Inter-national/ National/ Local) | Date (s) | Role | Venue |
|--|---|---------------|-------------|-------|
| Three – day Workshop on Binder Rheology organized by CETransE | National | 15-17/12/2016 | Co-Convenor | NITT |
| Three – day Short Term Training Programme on Recent Trends in Pavement Engineering organized by CETransE | National | 12-14/12/2016 | Co-Convenor | NITT |
| Three – day Workshop on Traffic Simulation Tools organized by CETransE | National | 01-03/12/2016 | Co-Convenor | NITT |

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|---|----------|---------------|-------------|---------------|
| Workshop on Alternate Technologies and Materials for PMGSY Roads for the EEs and AEEs of the Rural Development Department | National | 17/11/2014 | Convenor | DRD, Chennai |
| Workshop on R&D Technology Initiatives for the EEs and AEEs of the Rural Development Department | National | 18/09/2014 | Convenor | DRD, Chennai |
| Training Programme on Coir Geotextiles for the Rural Development AEEs and AEs | National | 07/10/2013 | Co-Convenor | NITT |
| DRD sponsored One-day Refresher Course on Quality Control of PMGSY Roads for State Quality Monitors | National | 09/05/2013 | Convenor | NITT |
| PMGSY Workshop on Rural Road Planning and Design for AEEs of RD Dept and ADEs of NH Dept | National | 22/02/2013 | Convenor | NITT |
| DRD sponsored One-day Workshop on Alternate Technologies for Road Construction for the EEs and AEEs of the Rural Development Department | National | 07/02/2013 | Convenor | DRD, Chennai |
| SIRD sponsored Training Programme on Convergence of Pradhan Mantri Gram Sadak Yojana (PMGSY) with other RD Programmes | National | 01/11/2011 | Co-Convenor | SIRD, Chennai |
| NRRDA sponsored six-day Training Programme on PMGSY for the AEs of the Rural Development Department | National | 13-18/07/2009 | Convenor | NITT |
| NRRDA sponsored three -day Training Programme on PMGSY for the AEEs of the Rural Development Department | National | 23-25/06/2009 | Convenor | NITT |
| NRRDA sponsored six-day Training Programme on PMGSY for the AEs of the Rural Development Department | National | 18-23/05/2009 | Convenor | NITT |
| TEQIP sponsored One Day Workshop on Design, Construction and Maintenance of Roads | National | 29/10/2007 | Convenor | NITT |
| NHAI sponsored Road Safety – Training of Users for Dissemination of Road Safety Manual – Users Workshop (UW6) | National | 20-22/10/2005 | Co-Convenor | New Delhi |

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|---|----------|---------------|-------------|-----------|
| NHAI sponsored Road Safety – Training of Users for Dissemination of Road Safety Manual – Users Workshop (UW5) | National | 17-19/10/2005 | Co-Convenor | New Delhi |
| NRRDA sponsored six-day Training Programme on PMGSY for the AEs of the Rural Development Department | National | 01-06/11/2004 | Convenor | NITT |
| NRRDA sponsored six-day Training Programme on PMGSY for the AEs of the Rural Development Department | National | 25-30/10/2004 | Convenor | NITT |
| NRRDA sponsored six-day Training Programme on PMGSY for the AEs of the Rural Development Department | National | 04-09/10/2004 | Convenor | NITT |
| NRRDA sponsored six-day Training Programme on PMGSY for the AEs of the Rural Development Department | National | 20-25/09/2004 | Convenor | NITT |
| NRRDA sponsored three -day Training Programme on PMGSY for the AEs of the Rural Development Department | National | 17-19/09/2003 | Convenor | NITT |
| ISTE – AICTE sponsored Winter School on Advanced Computer Applications in Transportation Engineering (ACATE) | National | December 1998 | Convenor | NITT |

18. Invited Talks delivered :

| Topic | Date | Inviting Organization |
|--|------------|--|
| Intelligent Transportation Systems in the Inauguration of International Conference | 24/10/2016 | Alagappa Chettiar College of Engineering and Technology, Karaikudi |
| Essentials of Research in the Inauguration of the PhD Programme | 28/11/2015 | Periyar Maniammai University, Thanjavur |
| Intelligent Transportation Systems in the Inauguration of National Conference | 23/07/2015 | SNS College of Engineering and Technology, Coimbatore |
| Recent Advances in Civil Engineering at the Department Day Function | 31/03/2015 | Shivani Engineering College, Trichy |

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| Intelligent Transportation Systems at the National Conference | 10/03/2015 | Ramakrishna College Engineering and Technology, Trichy |
| Recent Advances in Civil Engineering at the Inauguration of Civil Engineering Association | 28/08/2014 | Mt. Zion College Engineering and Technology, Pudukkottai |
| Intelligent Transportation Systems at the Inauguration of Civil Engineering Association | 27/08/2014 | Roevers College Engineering and Technology, Perambalur |
| Advances in Civil Engineering at the Civil Engineering Association | 14/07/2014 | Francis Xavier Engineering College, Tirunelveli |
| Intelligent Transportation Systems at the TEQIP sponsored National Workshop on Recent Developments in Transportation Engineering | 07/03/2014 | Coimbatore Institute of Technology, Coimbatore |
| Intelligent Transportation Infrastructure at the TEQIP sponsored Faculty Development Program on Innovative Practices in Highway Design, Construction, Maintenance and Safety | 20/02/2014 | Thiagarajar College of Engineering, Madurai |
| Intelligent Transportation Systems at the TEQIP Workshop on Transportation Infrastructure Planning – Latest Technologies | 21/11/2013 | Department of Civil Engineering, NITT |
| Keynote Address at the National Conference on Latest Advances in Civil Engineering for Sustainable Development – LACE 2013 | 10/04/2013 | SNS College of Technology, Coimbatore |
| Road Safety with Emphasis on Non-Motorised Traffic at the 67 th Meeting of the Highway Research Board | 08/01/2013 | 73 rd Annual Session of the Indian Roads Congress, Coimbatore |
| Applications of ITS under Indian Conditions in the National Conference on Sustainable Transportation using ITS (STUITS) | 17/02/2012 | St. Peter's College Engineering and Technology, Chennai |
| Recent Advances in Civil Engineering in the Inauguration of Civil Engineering Association | 09/02/2012 | Roevers College Engineering and Technology, Perambalur |
| Advances in Civil Engineering at the Civil Engineering Association | 14/07/2011 | M.A.M. College of Engineering & Technology, Trichy |
| Intelligent Transportation Systems at the Inauguration of Civil Engineering Association | 29/08/2010 | PRIST University, Thanjavur |

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|---|------------|---|
| ITS Applications in Road Safety at the Workshop on Innovative Techniques in Road Safety Management | 28/07/2010 | Sri Ram Engineering College, Chennai |
| Project Management in the Training Programme on Design, Construction and Maintenance of Bridges for the Engineers of Rural Development Department and Panchayat Raj | 28/06/2010 | Department of Civil Engineering, NITT |
| Project Management in the Training Programme on Design, Construction and Maintenance of Bridges for the Engineers of Rural Development Department and Panchayat Raj | 21/06/2010 | Department of Civil Engineering, NITT |
| Project Management in the Training Programme on Design, Construction and Maintenance of Bridges for the Engineers of Rural Development Department and Panchayat Raj | 31/05/2010 | Department of Civil Engineering, NITT |
| Research – Is it necessary for a teacher? at the Inauguration of ISTE Chapter | 09/12/2008 | Karunya University, Coimbatore |
| Intelligent Transportation Systems at the Advanced training programme on application of geomatics in urban transportation planning and management | 27/10/2008 | St. Peters University, Chennai |
| Advanced Public Transportation Systems at the Advanced training programme on application of geomatics in urban transportation planning and management | 27/10/2008 | St. Peters University, Chennai |
| Intelligent Transportation Systems at the National Seminar | 26/09/2008 | SASTRA, Thanjavur |
| Road Safety- An Engineering Perspective at the Inaugural function of the Civil Engineering Association | 22/07/2008 | Karunya University, Coimbatore |
| Relative Grading System at the Meeting of Directors and HODs | 21/07/2008 | Karunya University, Coimbatore |
| Relative Grading System at the Board of studies meeting | 12/05/2008 | Bharathidasan Institute of Management, Trichy |
| Intelligent Transportation Systems | 06/05/2008 | Institution of Engineers (India), Trichy |

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19. Membership of Learned Societies :

| Type of Membership (Ordinary Member/ Honorary Member / Life Member) | Organization | Membership No. with date |
|---|------------------------------|-----------------------------|
| Fellow | Institution of Engineers | F-114122-4 |
| Member | Highway Research Board | |
| Life Member | Indian Roads Congress | M-28407 |
| Life Member | ISTE | |
| Life Member | Institute of Urban Transport | |

20. Academic Foreign Visits :

| Country | Duration of Visit | Programme |
|-----------|-----------------------|---|
| Singapore | Nov 19 - Dec 18, 2007 | TEQIP Visit to National University of Singapore |
| USA | Dec 02 - Jan 19, 2014 | Visit to George Mason University |

21. Publications :

(A) Refereed Research Journals :

| Author(s) | Title of Paper | Journal | Volume (No.) | Page num- bers | Year | Impact Factor of the Journal |
|---|--|---|-------------------|-----------------------|-------------------|---------------------------------------|
| R.Then- mozhi, Nisha Radha- krishnan and S. Moses Santhakumar | Study on Efficiency of Existing Urban Road Space in Trichy City | Case Studies on Transport Policy, Elsevier | | | In rev- iew | |
| K. Kavitha and S. Moses Santhakumar | Feasibility Study of Emergency Vehicle Signal Preemption System for Tiruchirappalli City | International Journal of Applied Engineering Research | Vol. 10 No. 62 | ISSN 0973- 4562 | 2015 | |

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|---|---|---|----------------------|-----------------------|-------------------------|--|
| N.S.L. Aparna and S. Moses Santhakumar | Rear End Crashes on National Highways - Serious Threat to Road Safety | Journal of Development Management and Communication | Vol. II, No. 4 | ISSN 2348- 7739 | Oct – Dec 2015 | |
| R. Vidya, S. Moses Santhakumar and Samson Mathew | Estimation of IRI from PCI in Construction Work Zones | ACEE International Journal of Civil and Environmental Engineering | Vol. 2, No. 1 | | Aug 2013 | |
| R. Vidya, and S. Moses Santhakumar | Simulation Study of Construction Work Zones – A Case Study | Recent Trends in Civil Engineering & Technology, STM Publications | Vol. 2, No. 2 | | Feb 2012 | |
| R. Vidya, S. Moses Santhakumar and Samson Mathew | Impact of Work Zones on Speed Variation During Widening of the Highway | International Journal of Engineering Science and Technology | Vol. 4, No. 2 | pp. 546 – 554 | Feb 2012 | |
| P.Partheeban and S. Moses Santhakumar | Evaluation of Short Term Transportation System Management Measures using GIS | European Journal of Transportation Research | | | May 2009 | |
| P.Partheeban and S. Moses Santhakumar | Traffic Incident Management System using GIS | Indian Highways | | | Nov 2007 | |
| S. Moses Santhakumar P.Partheeban and Venu Bhaskar Reddy | GIS Based Transportation Information Management System | Indian Highways | | | July 2002 | |
| P.Partheeban and S. Moses Santhakumar | Optimal Bus Stop Spacing and Location using GIS | Urban Transport Journal, Institute of Urban Transport (India) | Vol. 1, No. 2 | pp. 63-78 | Dec 2000 | |
| P.Partheeban and S. Moses Santhakumar | Geographic Information System for Major Roads | Indian Journal of Transport Management, Central Institute of Road Transport | Vol. 24, No. 2 | pp. 169- 176 | Feb 2000 | |

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|---|--|--|-------------------|-------------|-----------|--|
| P.Partheeban and S. Moses Santhakumar | Geographical Information System for Major Roads – A Case Study of Tiruchirappalli | Indian Highways | | | Dec 1998 | |
| S. Selvaradj and S. Moses Santhakumar | Extraction of Small Area Network for Analysis of TSM Options | Transportation Research Board, National Research Council | | | Sept 1998 | |
| S. Moses Santhakumar and Srinivas Pathuri | Development of Areawide Traffic Control System for Tiruchirappalli | Journal of Traffic and Transportation | | | Sept 1998 | |
| S. Moses Santhakumar | User Perception of the Shuttle Bus Transit System in Madurai | Indian Highways | | | July 1998 | |
| P.Partheeban and S. Moses Santhakumar | Applicability of GIS/IVHS/GPS Technology for Indian Conditions | Journal of Traffic and Transportation | | | Jan 1997 | |
| S. Moses Santhakumar | Headway Distribution at Origin of Urban Bus Routes | Journal of Traffic and Transportation | | | Oct 1996 | |
| S. Moses Santhakumar | Expert System for Tyre Management in Public Transport Corporations | Indian Highways | | pp. 17-25 | Dec 1993 | |
| P. M. Koola and S. Moses Santhakumar | Wave Data off Trivandrum using an On-line Data Analysis System | Journal of the Institution of Engineers (India) | Vol. 73, Part CV5 | pp. 163-167 | Jan 1993 | |
| M. Subbi Reddy and S. Moses Santhakumar | User Compliance at Pedestrian Subways | Transportation Research Board, National Research Council | | | Aug 1992 | |
| P. Hariharan and S. Moses Santhakumar | Transportation Systems Management Options to Improve Urban Bus Route Performance using Computer Simulation | Transportation Research Board, National Research Council | TRR 1338 | pp. 22-27 | 1992 | |

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|--------------------------------------|---|--|-------------------|-------------|-----------|--|
| P. M. Koola and S. Moses Santhakumar | Identification of Representative Wave Record from Multiple Wave Records | Marine Engineering Journal, Institution of Engineers | | | June 1991 | |
| S. Moses Santhakumar | Comparative Study of Pedestrian Crossings using Computer Simulation | Indian Highways - Computer Applications in Highway Engineering | Vol. 19, No. 6 | pp. 89-97 | June 1991 | |
| S. Moses Santhakumar | Performance Evaluation and Design of Signal Settings by Simulation | Indian Highways | Vol. 19, No. 3 | pp. 11-21 | Mar 1991 | |
| D.J. Victor and S. Moses Santhakumar | Components of In-Vehicle Travel Time on City Bus Routes | Journal of the Institution of Engineers (India) | Vol. 68, Part CII | pp. 51-53 | July 1987 | |
| D.J. Victor and S. Moses Santhakumar | Distribution of Green Time and Red Time at Police-Controlled T-junctions and Mid-block Pedestrian Crossings | Indian Highways | Vol. 15, No. 6 | pp. 18-25 | June 1987 | |
| D.J. Victor and S. Moses Santhakumar | Simulation Study of Bus Transit | Journal of Transportation Engineering, American Society of Civil Engineers | Vol. 112, No. 2 | pp. 199-211 | Mar 1986 | |
| D.J. Victor and S. Moses Santhakumar | Boarding Time and Stopped Time of City Buses in Madras | Indian Highways | Vol. 13, No. 10 | pp. 28-33 | Oct 1985 | |

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(B) Conferences/Workshops/Symposia Proceedings :

| Author(s) | Title of Abstract/ Paper | Title of the Proceedings | Page numbers | Conference Theme | Venue | Year |
|--|--|---|--------------|-------------------------|-----------------------------------|------------------|
| Chetan Bhole, V. Sunitha, Samson Mathew and S. Moses Santhakumar | Field implementation and Performance of Coir Geotextiles Reinforced Roads | International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV8) | | Pavement Engineering | Singapore | 27-29 July 2016 |
| K. Kavitha and S. Moses Santhakumar | Traffic Incident Duration and Incident Recovery Time Prediction Model for Tiruchirappalli City | International Conference on Engineering and Material Sciences 2016 (ICEMS 2016) | | Civil Engineering | Jaipur National University | 17-18 March 2016 |
| AR. Hemanthini and S. Moses Santhakumar | Safety Analysis for Urban Roads in Tiruchirappalli City | International Conference on Engineering and Material Sciences 2016 (ICEMS 2016) | | Civil Engineering | Jaipur National University | 17-18 March 2016 |
| R. Thenmozhi, Nisha Radhakrishnan and S. Moses Santhakumar | Spatial Distribution of Urban Road Network in Trichy City using Quick-bird Satellite Image | International Conference on Sustainable Developments in Science Engineering Technology & Humanities | | Sustainable Development | PSN Engineering College, Dindigul | 10-11 March 2016 |
| R. Thenmozhi, Nisha Radhakrishnan and S. Moses Santhakumar | Evaluation of Existing Road Transport Infrastructure in Trichy City Using GIS | GeoSmart India/ GeoSmart Asia 2016 | | GIS | Greater Noida | 1-3 March 2016 |

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|--|--|--|-----------------|------------------------|--------------|--------------|
| K. Kavitha and S. Moses Santhakumar | Emergency Vehicle Signal Preemption System For Tiruchirappalli City Having Heterogeneous Traffic Condition | 25th World Road Congress on Roads and Mobility – Creating New Value from Transport | Paper No. IP735 | Roads and Mobility | PIARC, Seoul | 2-6 Nov 2015 |
| R.Then-mozhi, Nisha Radhakrishnan and S. Moses Santhakumar | GIS Based Quantitative-Spatial Assessment of Existing Road Network in Trichy City Using Statistical Approaches | Conference on Transportation Systems Engineering and Management (CTSEM) | | Transportation Systems | NITT | 1-2 May 2015 |
| S. Naveen Kumar and S. Moses Santhakumar | Co-ordination of Traffic Signal as an ITS Measure for Urban Arterials | Conference on Transportation Systems Engineering and Management (CTSEM) | | Transportation Systems | NITT | 1-2 May 2015 |
| K. Kavitha and S. Moses Santhakumar | Impact of Emergency Vehicle Signal Preemption on Urban Traffic | Conference on Transportation Systems Engineering and Management (CTSEM) | | Transportation Systems | NITT | 1-2 May 2015 |
| AR. Hemanthini and S. Moses Santhakumar | Accident Analysis and Remedial Measures for Tiruchirappalli City | Conference on Transportation Systems Engineering and Management (CTSEM) | | Transportation Systems | NITT | 1-2 May 2015 |

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| R. Rajkumar and S. Moses Santhakumar | Improvements to Public Transport in Chennai by Integrated Multimodal Transportation System | Conference on Transportation Systems Engineering and Management (CTSEM) | | Transport- ation Systems | NITT | 1-2 May 2015 |
| N.S.L. Aparna and S. Moses Santhakumar | Analysis and Mitigation of Rear End Collisions on Highways | Conference on Transportation Systems Engineering and Management (CTSEM) | | Transport- ation Systems | NITT | 1-2 May 2015 |
| D. Arundoss and S. Moses Santhakumar | Analysis of Geometric Features and Traffic Characteristics of Service Roads Using Simulation | Conference on Transportation Systems Engineering and Management (CTSEM) | | Transport- ation Systems | NITT | 1-2 May 2015 |
| C. Ritika and S. Moses Santhakumar | Simulation Based Performance Evaluation of Urban Roundabout with Signals | Conference on Transportation Systems Engineering and Management (CTSEM) | | Transport- ation Systems | NITT | 1-2 May 2015 |
| Ch. Sudheer Kumar and S. Moses Santhakumar | Feasibility of Monorail for Tiruchirappalli City | Conference on Transportation Systems Engineering and Management (CTSEM) | | Transport- ation Systems | NITT | 1-2 May 2015 |

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| K. Kavitha and S. Moses Santhakumar | Feasibility Study of Emergency Vehicle Signal Preemption System for Tiruchirappalli City | International Conference on Advances in Civil Engineering Materials and Processes (ICACEMAP) | | Civil Engineering | Coimbatore Institute of Tech., Coimbatore | 7-8 Jan 2015 |
| S. Iswarya and S. Moses Santhakumar | Simulation of Traffic Flow Around an Urban Roundabout | First Annual Conference on Innovations and Developments in Civil Engineering, ACIDIC-2014 | | Civil Engineering | NITK, Surathkal | 19-20 May 2014 |
| S. Divya and S. Moses Santhakumar | Simulation of Pedestrian Crossing Behaviour along an Urban Corridor | First Annual Conference on Innovations and Developments in Civil Engineering, ACIDIC-2014 | | Civil Engineering | NITK, Surathkal | 19-20 May 2014 |
| Chetan Bhole, V. Sunitha, Samson Mathew and S. Moses Santhakumar | Potential of Coir Fiber in Subgrade Improvement | 1st International Conference on Natural Fibers, ICNF2013 | | Pavement Engineering | Guimarães- Portugal | 9-11 June 2013 |

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| Arif Ashraf, Nisha Radha- krishnan, Samson Mathew and S. Moses Santhakumar | Speed Detection and Management – ITS Application | India Geospatial Forum, Hyderabad | | GIS | Inter- national Convention Centre, Hyderabad | 22 -24 January 2013 |
| S. Naveen Kumar, S. Moses Santhakumar and Samson Mathew | Traffic Signal Co-ordination as an ITS Measure for Urban Arterials in Chennai City | National Conference on Urban Mobility – Challenges, Solutions and Prospects | | ITS | IIT Madras | 13-14 July 2012 |
| Arif Ashraf, Nisha Radha- krishnan, Samson Mathew and S. Moses Santhakumar | Urban Speed Management using ITS | National Conference on Urban Mobility – Challenges, Solutions and Prospects | | ITS | IIT Madras | 13-14 July 2012 |
| M. Hemalatha. S. Moses Santhakumar and Samson Mathew | Development of GIS based Framework to Plan and Monitor PMGSY Roads | International Conference on Geospatial Technologies and Applications, Geomatrix '12 | | GIS | IIT Bombay | 26-29 Feb 2012 |
| S. Naveen Kumar and S. Moses Santhakumar | Co-ordination of Traffic Signals as an ITS Measure for Urban Arterials | National Conference on Sustainable Transportation using ITS | pp. 88-99 | ITS | St. Peter's College Engineering and Tech., Chennai | 16-17 Feb 2012 |
| R. Vidya and S. Moses Santhakumar | Estimation of IRI from PCI in Construction Work Zones | Second International Joint Conference on Advances in Engineering and Technology | | Engineering and Technology | AET – ACE, Noida | 20-21 Dec 2011 |

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| Basil Bas-heerudeen, Samson Mathew, S. Moses Santhakumar and Nisha Radha-krishnan | Urban Speed Management – A Case Study of Tiruchirappalli City | Research Symposium at Urban Mobility India | | Urban Mobility | New Delhi | 3 Dec 2011 |
| G. Evangeline Joyce and S. Moses Santhakumar | Development of Park & Ride System in Tiruchirappalli City | International Conference of Transportation Research Group of India | | Transportation Planning | Bangalore | Nov 2011 |
| R. Vidya, S. Moses Santhakumar and Samson Mathew | Road Surface Image Segmentation, Texture Analysis and Classification using Image Processing | National conference on Sustainable Urban & Transportation Planning: Issues & Management Strategies (SUTRIMS 11) | | Transportation Planning | SVNIT, Surat | 8-10 July 2011 |
| G. Evangeline Joyce, S. Moses Santhakumar and Samson Mathew | Traffic Information and Management | National Conference on Current Trends in Telematics | | Telematics | Sri Ram Engineering College, Chennai | 27-28 Jan 2011 |
| Dhanush Laxman, S. Moses Santhakumar and Samson Mathew | Advanced Driver Assistance Systems (ADAS): A State of the Art | National Conference on Current Trends in Telematics | | Telematics | Sri Ram Engineering College, Chennai | 27-28 Jan 2011 |
| J. Vijay Anand, S. Moses Santhakumar and Samson Mathew | Dynamic Route Guidance System - A Case Study of Tiruchirappalli City | Indo-Us Workshop On Emerging Trends In Intelligent Transportation Systems | | ITS | IIT Madras | 11-13 Feb 2010 |

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| S. Moses Santhakumar | Speed Variation in the Construction Work Zone | Proceedings of Symposium on Research in Civil Engineering | pp. 201- 202 | Research in Civil Engineering | IIT Madras | 5-6 March 2009 |
| S. Sreenivasulu, R. Jayasankar, S. Moses Santhakumar and Samson Mathew | Effect of Temperature Differential on Warping Stresses in Rigid Pavements | Proceedings of Symposium on Research in Civil Engineering | pp. 191- 192 | Research in Civil Engineering | IIT Madras | 5-6 March 2009 |
| S. Moses Santhakumar, Samson Mathew and A. Ganesh Raja | GIS Based Analysis of PMGSY Road Network of Tamil Nadu | National Conference on Application of GIS in Civil Engineering | pp. 173- 191 | GIS | Karunya University, Coimbatore | 16 Feb 2008 |
| S. Moses Santhakumar, Samson Mathew and K. Rahul | Intelligent Transportation System Applications in Road Safety – A Case Study of Tiruchirappalli City | National Conference on Application of GIS in Civil Engineering | pp. 15–24 | GIS | Karunya University, Coimbatore | 16 Feb 2008 |
| S. Moses Santhakumar, Samson Mathew, R. Jayasankar and V. Sunitha | Impact of PMGSY on Travel Characteristics of Tamil Nadu Rural Population | National Conference on Rural Roads | | Rural Roads | Ministry of Rural Develop- ment, New Delhi | 22-24 May 2007 |
| Samson Mathew, S. Moses Santhakumar, V. Sunitha and J. Sheeba | Travel Characteristics of Tamil Nadu Rural Population | National Conference on Earthquake and Transportation Engineering | pp. 144- 153 | Transport- ation Engineering | Sona College of Tech., Salem | 22-23 Mar 2007 |

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| S. Moses Santhakumar | Vehicle Tracking – Principles and Applications | Workshop on Vehicle Tracking using GPS and GIS | pp. 1-17 | GPS and GIS | IRTT, Erode | 6 Mar 2007 |
| Samson Mathew and S. Moses Santhakumar | Studies on Polymer Modified Bituminous Mixes | National Seminar on Roads 2007 | pp. 172-178 | Highway Engineering | Institution Engineers (India), Belgaum | 1-2 Mar 2007 |
| Samson Mathew, S. Moses Santhakumar, S. Saraswathy and V. Palanikumar | Application of GPS in Study of Highway Geometrics | National Conference on GIS, GPS and RS Applications in Transportation Planning and Management | pp. 151-159 | GIS, GPS and RS | St. Peter's Engineering College, Chennai | 21-22 Nov 2006 |
| S. Moses Santhakumar, Samson Mathew and A. Siddique | Pavement Management System for Rural Roads | National Conference on GIS, GPS and RS Applications in Transportation Planning and Management | pp. 122-132 | GIS, GPS and RS | St. Peter's Engineering College, Chennai | 21-22 Nov 2006 |
| S. Moses Santhakumar, Samson Mathew and Sayed Bilal | Applications of Geographical Information Systems in the Transportation Sector | National Conference on GIS, GPS and RS Applications in Transportation Planning and Management | | GIS, GPS and RS | St. Peter's Engineering College, Chennai | 21-22 Nov 2006 |
| R. Jayasankar and S. Moses Santhakumar | Influence of Fly Ash, WMA on Properties of Self Compacting Concrete | Second National Conference on Advances in Materials and Mechanics of Concrete Structures | | Concrete Structures | IIT Madras | 12-13 Aug 2005 |

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| R. Sundaresan, Samson Mathew and S. Moses Santhakumar | GIS-GPS Based Monitoring of Water Supply Trucks of Tiruchirappalli Corporation | National Conference on Applications of Information and Communication Technologies in Urban Infrastructure Planning and Management | | Urban Infra-structure Planning | Jaya Engineering College, Chennai | 19 March 2005 |
| S. Moses Santhakumar | Free Speeds of Vehicles on NH-45 and NH-67 | National Conference on Advances in Road Transportation (ART-2005) | pp. 287-299 | Road Transportation | NIT, Rourkela | 12-13 Feb 2005 |
| S. Moses Santhakumar | Signal Timing Optimisation for Urban Arterials in Tiruchirappalli City | National Conference on Advances in Road Transportation (ART-2005) | pp. 274-286 | Road Transportation | NIT, Rourkela | 12-13 Feb 2005 |
| Samson Mathew and S. Moses Santhakumar | Vehicle Tracking using GPS - A Case Study of Two Wheeler Tracking in NIT Tiruchirappalli Campus | National Conference on Application of GIS and GPS in Civil Engineering | pp. 138-147 | GIS | Jaya Engineering College, Chennai | 03 July 2004 |
| S. Moses Santhakumar | Application of GIS to PMGSY Roads | National Conference on Applications of GIS for Rural Development | | GIS | TTTI, Chennai | 11-12 Dec 2003 |
| S. Moses Santhakumar and G. Gokuldas | Transportation System Management for Madurai City Using GIS | International Conference on GIS – Map India 2003 | | GIS | New Delhi | 28-31 Jan 2003 |

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| S. Moses Santhakumar | Vehicle Tracking System - A Case Study of Madurai Ring Road | International Seminar on Sustainable Development in Road Transport | pp. I-485-496 | Sustainable Development | New Delhi | 8-10 Nov 2001 |
| S. Moses Santhakumar and P. Partheeban | GIS Based Emergency Response System | International Seminar on Sustainable Development in Road Transport | pp. I-439-451 | Sustainable Development | New Delhi | 8-10 Nov 2001 |
| P. Partheeban and S. Moses Santhakumar | A Geographical Information System for the Highways around Tiruchirappalli | National Seminar on Trends and Techniques in Transportation | | Transportation Systems | R E C, Warangal | August 1997 |
| P. Partheeban and S. Moses Santhakumar | Applicability of GIS in Highway and Transportation Engineering | National Seminar on GIS and Geological Remote Sensing | | GIS | Bharathidasan University, Tiruchirappalli | Feb 1997 |
| S. Moses Santhakumar | Decentralisation of Bus Terminus for Congestion Reduction in Madurai City (Tamil Nadu) - A Case Study | International Conference on New Challenges for Civil Engineers of Developing Countries | | Civil Engineering | JMI, New Delhi | March 1996 |
| T. S. Venkataraman and S. Moses Santhakumar | Investigation on Thick Lift Construction and Design of Large Aggregate Mixes | Seminar on Bituminous Roads Design and Construction Aspects | | Bituminous Roads | Indian Roads Congress, New Delhi | August 1994 |

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| S. Moses Santhakumar | Optimisation of Inventory Control of Public Transport Spares using Computer Simulation | National Seminar on Advances in Transportation Systems | pp. B7.1-5 | Transportation Systems | IIT Madras | March 1992 |
| S. Krishna-moorthi and S. Moses Santhakumar | Prediction of Impact of Water Stress on Yield of Paddy using Computer Simulation | National Seminar on Use of Computers in Hydrology and Water Resources | pp. 3:16-25 | Water Resources | Central Water Commission, New Delhi | Dec 1991 |

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