

CHANDAN MYSORE CHANDRASHEKAR

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ACADEMIC POSITIONS

National Institute of Technology Karnataka (NITK) Surathkal, India <i>Assistant Professor, Department of Water Resources & Ocean Engineering (WROE)</i>	<i>Dec 2024–Present</i>
The National Institute of Engineering (NIE), Mysore, Karnataka, India <i>Assistant Professor, Department of Civil Engineering</i>	<i>Jan 2021–Dec 2024</i> <i>Jul 2015–Dec 2016</i>
Sobha Developers Limited, Bangalore, India <i>Management Trainee</i>	<i>Jul 2011–Aug 2012</i>

EDUCATION

Indian Institute of Technology (IIT), Kharagpur, West Bengal, India <i>Doctorate in Urban Infrastructure Modelling using Geoinformatics.</i> <i>Dissertation: Urban Land Use Modelling and Developing a Framework of Spatial Decision Support System for Indian Cities</i> <i>Advisor: Bharath H Aithal. Committee: Joy Sen, Bhargab Maitra, Arkopal K Goswami</i>	<i>2021</i>
National Institute of Technology Karnataka (NITK), Surathkal, India <i>Master of Technology in Remote Sensing and GIS. CGPA: 7.94/10</i>	<i>2015</i>
The National Institute of Engineering (NIE), Mysore, Karnataka, India <i>Bachelor of Engineering in Civil Engineering. CGPA: 8.12/10</i>	<i>2011</i>

AWARDS & RESEARCH GRANTS

Awards & Fellowships:

- Recipient of the [IEEE Region 10 Professional Certification Grant 2025](#).
- Best Paper Award: Water Urbanism and Infrastructure Development in Eco-Sensitive Zones, 2017, Kolkata.
- Best Paper Award: Research for Transport and Logistics Industry (R4TLI), 2022, Colombo.
- Sahyadri Ecologist Award, IISc Bangalore, 2018.
- Travel Awards: FOSS4G Asia conference, Moratuwa, Sri Lanka (2018) – CSIR Travel Grant; Fall Meeting, AGU, USA (2018) – IIT Kharagpur Travel Grant; 16th International Conference – CUPUM, China (2019) – IIT Kharagpur Travel Grant – [Links to various awards](#)
- Fellowships: Post-graduation education (2013–15); Doctoral research (2017–2021) by the Ministry of Human Resource Development, Govt. of India.

Funding & Grant:

- Co-PI – [Condition Assessment and Development of Management Plan for Krishna River Basin](#) (CAMP). Funded by Department of Water Resources, Ministry of Jal Shakti (through National River Conservation Directorate). Project Cost: INR 627 Lakhs. Duration: 36 months (Feb 2024–Feb 2027). PI: Prof. Basavaraju Manu, NITK.
- NITK Surathkal [Faculty Seed Grant](#) – Rs. 10 Lakhs (approved 13-Oct-2025).
- Consultancy – Revenue Department, Govt. of Karnataka: Sand/silt dredging operations in the estuary near Brahmavara Taluk, Kodikanyana Jetty. Project Cost: INR 84 Lakhs (Official communication yet to be recd.)

PUBLICATIONS

International Journals (SCI/SCOPUS/SSCI/WOS)	Book Chapters	International Conferences	National Journals	National Conferences
6	7	6	1	8

More details in [Annexure - A](#)

RESEARCH GUIDANCE

	Completed (Guided Sole)	Ongoing (Guided Sole)	Completed (Guided Joint)	Ongoing (Guided Joint)
PhD	--	3	--	1
M.Tech	2	8	5	--
UG	4	--	--	--

More details in [Annexure - B](#)

- PhD Research Advisory Committee Member – JSSAHER, Mysore (04 Mar 2026 – present).

TEACHING EXPERIENCE

National Institute of Technology Karnataka (NITK) Surathkal *Dec 2024–Present*

Assistant Professor, Dept. of Water Resources & Ocean Engineering

- WO832 – Applications of RS & GIS in Agriculture & Soil Science
- WO833 – Applications of RS & GIS in Town & Country Planning
- WO732 – Geographic Information Systems
- WO110 – Engineering Mechanics
- WO317 – Fluid Mechanics and Machinery Lab (UG)
- WO219 – Hydraulics Lab (UG)
- WO755 – Seminar (PG) | WO737 – Design Project (PG)

The National Institute of Engineering (NIE), Mysore *Jan 2021–Dec 2024*

Assistant Professor, Department of Civil Engineering

[Teaching link](#)

Indian Institute of Technology, Kharagpur *Jan 2017–Jun 2021*

NPTEL Teaching Assistant – Geographic Information Systems (online course)

[Course link](#)

RESOURCE PERSON AT INTERNATIONAL EVENTS & INVITED TALKS

Expert Lectures / Resource Person (since joining NITK) *2025–2026*

- 12-day Refresher Course on '[GIS: Concepts and Applications](#)' (Resource Person), RIE Mysore and JSS AHER Mysore under MMTTC/UGC, New Delhi. (16-28 Feb 2026)
- International Conference on [Water Security, Sustainability, and Disaster Risk Reduction](#), Alva's Institute of Engineering & Technology, in association with IEEE GRSS and BRICS. (16-18 Feb 2026)
- 3-day Workshop on '[Remote Sensing and Applications](#)' (Resource Person), SJEC Mangalore and IEEE GRSS. (3-5 Dec 2025)
- 5-day FDP - '[Advances in Intelligent Civil Engineering \(AICE\) - 2025](#)' (Resource Person), MITS Deemed University. (10-14 Sep 2025)
- 5-day FDP on '[Recent Advancements in Civil Engineering](#)' (Distinguished Speaker), Rajshree Institute of Management & Technology, Bareilly. (4-8 Aug 2025)
- Pre-conference workshop - Aware 2025: [Urban flood modelling](#), MANIT Bhopal, in association with Central Water Commission, Ministry of Jal Shakti. (10-12 June 2025)
- ANRF Sponsored Short Term Training Program on '[Hydrological Modeling Using SWAT](#)', MANIT Bhopal & IISER Bhopal. (05-09 May 2025)

- LiFEstyle for Environment [Virtual Webinar](#) on 'Application of Geo-informatics in Agriculture Water Resource', IISc Bangalore. (22 March 2025)
- 5-day FDP on 'Smart Surveying and AI-ML for GIS and Image Processing', NMAM Institute of Technology, Nitte. (20-25 March 2025)

FOSS4G Asia 2024 conference, Bangkok, Thailand

Dec 2024

- Workshop Instructor – [Web-Based Spatial Decision Support System \(SDSS\) Using Geoserver](#), 15 December, 2024.

Invited Talks & Workshops

2015–2021

- [All India Radio-Aakashvani Mysuru FM 100.6](#) - Vigyana Bharathi series - 'Remote Sensing and GIS' - 21 July, 2022.
- [FDP on Research Tools – Amity University](#) - 'Mapping Technique - Going the Digital Way', 24-28 March 2022.
- [IEEE GRSS Chapter Bangalore Section](#) - 'Indian Cities - Spatio-temporal evolution and growth analysis using open source Geospatial data' - 29 October 2021.
- [AICTE ATAL Academy FDP - Remote Sensing and GIS](#), KLS Gogte Institute of Technology, Belagavi – 13–17 September 2021.
- [Mahatma Gandhi NREGA at ANSIRD](#), Mysore – 22–23 March 2021.
- [School of Human Settlements, Xavier University, Bhubaneswar – Urban Symposium](#) – 9 February 2021.
- [NITK Alumni Meet - Remote Sensing, GIS and Research Opportunities](#) – 26 September 2020.
- OSGeo Korean Chapter – Workshop Instructor – [Urban modelling using cellular automata-based SLEUTH](#) – 12 November, 2020.
- AICTE, IISc-Bangalore – [FOSS4G for Natural Resources Management](#) – 27–31 May, 2019.
- AICTE, IIT Kharagpur – [FOSS for Urban Planning](#) – 27–31 May, 2019.
- FOSS4G Asia conference, University of Moratuwa, Sri Lanka – [Workshop Instructor](#) – 02–05 December, 2018.
- CiSTUP, IISc Bangalore / ISRO / OSGeo-India – Organising committee and trainer – [FOSS4G for urban environment applications](#) – 1–5 April, 2015.
- CiSTUP, IISc Bangalore - 'Urban issues in Chennai - A remote sensing approach' - February 2015.
- Larsen and Toubro, C-TEA Mysore campus - 'GPS: Basics and Advances in Foundation and Surveying' - December 2015-October 2016.

Posters:

- Bharath, H. A., Chandan, M. C., Nimish, G. and Prakash, P. S. (2018). Modelling and Characterizing Urban Growth Pattern in Silicon Valley: Establishing a Relationship with LST and Building Footprint, Abstract [NH43B-2989] poster, 2018 Fall Meeting, AGU, Washington, D.C., 10–14 December, 2018.
- Chandan, M. C., Sudeep, V. B., Bharath, H. A. (2018). Exploring Spatial Trends of Urban Growth and Modelling the Change of Land Use in Varanasi. Poster, National Symposium on Sustainable Cities, IIT-Kharagpur: 1–3 November, 2018.
- Chandan, M. C., Aishwarya, N., Bharath H. A. (2017). Multi-Temporal Urban Growth Characterization Using Geospatial Technologies. Poster, Asian Conference on Remote Sensing, New Delhi: October 23–27, 2017.

Online Media:

- <http://swaut.co.in/> – Lead researcher for the Spatial Web-based Analysis of Urban Transition (SWAUT) portal, providing city-level spatio-temporal information on rapid urban development. Jointly developed with Dr. Bharath H Aithal, EURG, IIT Kharagpur.
- [Citizen Matters](#) – Urbanisation and temperature trends: Land surface temperatures in Chennai.
- [Citizen Matters](#) – Urbanisation and temperature trends: Bengaluru's climate no longer cool.

SHORT TERM COURSES / FDPS / WORKSHOPS ORGANIZED

NITK Surathkal (since joining, Dec 2024)

2025–2026

- 1-day '[2nd Geospatial Industry Conclave - 2026](#)' - Convener/Coordinator. Jointly organized by Dept. of WROE and ECE, IEEE GRSS Bangalore Chapter, NITK. 28 March 2026.
- 3-day International Conference on '[Water Security, Sustainability, and Disaster Risk Reduction in the Era of Changing Climate](#)' - Organizing Committee Member. Alva's Institute of Engineering & Technology, in association with IEEE GRSS and BRICS. 16-18 Feb 2026.
- 1-day symposium on 'Intelligence in Every Drop: AI, Water, and a Sustainable Future' - Co-Coordinator. Organized by Dept. of WROE, NITK. 23 January 2026.

- Symposium on River Health Evaluation & Protection ([RHEAP 2025](#)) – Convener. Organized by Centre for Krishna River Basin Management Studies, NITK. 29–30 Dec 2025.
- 5-day Workshop on '[AI with Earth Systems: Hands-on with Python, ML & Deep Learning for Earth Systems and Engineering Applications](#)' - Coordinator. Jointly organized by Dept. of WROE and ECE, IEEE GRSS Bangalore Chapter, NITK. 31 Aug - 04 Sep 2025.
- 1-day Workshop on '[Krishna River Basin Management Studies \(KRBMS\)](#)' - Convener. Organized by Centre for Krishna River Basin Management Studies, NITK. 21 July 2025.
- 5-day FDP on '[Advances in Satellite Tracking and Geospatial Techniques for Water Resources Management](#)' – Coordinator. Jointly organized by Dept. of WROE and ECE, IEEE GRSS Bangalore Chapter, NITK. 07–11 April 2025.

The National Institute of Engineering, Mysore

2021–2024

- [5-day FDP on Emerging Trends in UAV and Practical Applications](#) – Coordinator. Funded by IEEE GRSS Bangalore Section. 16–20 January 2024.
- [5-day FDP on Research Insights in Civil Engineering \(RICE-2023\)](#) – Coordinator. Dept. of Civil Engineering, NIE, Mysuru. 24–28 July 2023.
- [5-day Summer School on New Horizons in Remote Sensing: Basics and Beyond](#) – Coordinator. Funded by IEEE GRSS Bangalore Section and Dept. of Civil Engineering, NIE. 08–12 August 2023.
- [1-day National Webinar on Floodplain Analysis and Mapping](#) – Coordinator. Funded by DHI India and Dept. of Civil Engineering, NIE. 08 October 2021.

UNIVERSITY SERVICE

IEEE GRSS Bangalore Chapter

2021–Present

- Executive Committee Member (2021–2023) | Secretary (2024–2025) | [Vice-Chair](#) (2025–present).

NITK Surathkal – Administrative Responsibilities

2025–2026

- [Hostel Block Warden](#) – Block 1, Karavali (July 2025–present).
- [NITK Hostel Trust Board Member](#) (Aug 2026–present).
- NITK Student Co-op Society – [Board of Directors](#) (2025–26).
- Institute Anti-Ragging Squad (July 2025–July 2026).
- Department Faculty Coordinator – Orientation Programme (26–31 Aug 2025).
- Secretary – DUGC; Department Examination Monitoring Team; Faculty Advisor, PG M.Tech. (Geoinformatics) 1st Year (2025–26).
- Lab In-charge – RS & GIS / Computer Lab.
- Verifying Officer – CCMT and CCMN Online Counselling (June–Aug 2025).
- 23rd Annual Convocation – Invitation Committee Member (15 Nov 2025).
- National Space Day – Event Coordinator for Hospitality, Publicity and Photography, Stage Arrangements and MC (23 Aug 2025).

Service to Profession

- TPC Member – 7th International Conference on Geology, Mapping and Remote Sensing (ICGMRS), Zhoushan, China, 17–19 April 2026. <https://www.icgmrs.com/committee>
- Technical Visit Coordinator – [Varahi Underground Hydro Power Station and Mani Reservoir](#), KPCL, Govt. of Karnataka (14 March 2026).
- Technical Visit Coordinator – [Indian Institute of Space Science and Technology](#) (IIST/ISRO/VSSC), Thiruvananthapuram (11–12 March 2026).
- Industrial MOU – [Mitti Labs](#), Mumbai: Single point of contact for collaborative R&D, student internships, placements (July 2025–July 2028).
- Reviewer – [11th IEEE CONECCT 2025](#), IEEE Bangalore Section (10–13 July 2025).
- Domain Expert / Reviewer – Virtual Labs, Advanced Remote Sensing and GIS Lab (CIVIL-P14), Feb 2025.
- Confidential work – Teachers Recruitment Board, Chennai (25–27 Feb 2025).

REVIEWER

Asian Geographer

Geo-spatial Information Science

Indian Geotechnical Journal (I.F. 1.4)

Indian Society of Remote Sensing (I.F. 2.2)
International Journal of Remote Sensing
International Review for Spatial Planning and Sustainable Development
Journal of Cleaner Production
Journal of Environmental Management
Kybernetes
Letters in Spatial and Resource Sciences
Springer Nature Scientific Reports
Book Chapter Reviews: Geospatial Innovation: Igniting Smart Cities, Eco-Synergy, and Urban Resurgence; Innovations in Geospatial Technology for Sustainable Smart City Development.

CERTIFICATE COURSES

- [IEEE Blended Learning Program on Python](#), 15 September 2025, completed as recipient of IEEE Region 10 Professional Certification Grant 2025.
- [IEEE GRSS and IADF School on Computer Vision for Earth Observation](#), 14 September 2025, completed as recipient of IEEE Region 10 Professional Certification Grant 2025.
- [IUCEE International Engineering Educator Certification Program](#), Spring 2024.
- [Urban Flood Modelling in a Changing Climate](#) – ISRO sponsored, BITS Pilani Hyderabad Campus, June 2024.
- [Programming for Everybody \(Getting Started with Python\)](#) – University of Michigan / Coursera, April 2024.
- [Remote Sensing and GIS Applications in Agricultural Water Management](#) – IIRS/ISRO, September 2023.
- [NBA Accreditation and Teaching and Learning in Engineering \(NATE\)](#) – NPTEL-AICTE 12-week FDP, Grade A, Jan–Apr 2022.
- [Environment Management](#) – 3-credit course, CCE, IISc, Grade A, September–December 2014.

COMPUTER SKILLS

GIS & Modelling: R, ArcGIS, Open Jump, Geoserver, QGIS, SLEUTH, Idrisi.

Remote Sensing & Image Processing: Erdas Imagine, WebODM, eCognition, GRASS GIS, HEC-RAS, HEC-HMS.

Programming: C, Python for Geospatial Applications, Google Earth Engine, HTML, CSS, Java. Other: AutoCAD, Revit 3D, Solid Edge.

LANGUAGES & MEMBERSHIPS

Languages: Kannada (native), English, Hindi, and Deutsch (intermediate spoken).

Membership of Professional Bodies: Institute of Electrical and Electronics Engineers ([IEEE – Senior Member](#)) and Geoscience and Remote Sensing Society (GRSS); International Society for Photogrammetry and Remote Sensing ([ISPRS](#)); Indian Society of Remote Sensing ([ISRS](#)); Indian Meteorological Society ([IMS](#)); Indian Society of Geomatics (ISG).

REFERENCES

Rahul Dev Garg

Professor, Geomatics Engineering, Indian Institute of Technology, Roorkee, India.

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T. V. Ramachandra

Senior Scientific Officer and Coordinator, Energy & Wetlands Research Group, Centre for Ecological Sciences, Indian Institute of Science, Bangalore 560012, India. +91-80-22933099

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Bharath H. Aithal

Associate Professor and PhD Thesis Advisor, RCG School of Infrastructure Design and Management, Indian Institute of Technology Kharagpur 721302, India.

bharath@infra.iitkgp.ac.in

Annexure – A

PUBLICATIONS LIST

Journal Papers:

1. Chandan, M. C., & Bharath, H. A. (2021). Impact assessment of Corridor Oriented development – A case of urban agglomerations of India. *International Review for Spatial Planning and Sustainable Development*, 9(2), 172–194. https://doi.org/10.14246/irspsdc.9.2_172
2. Bharath, H. A., Chandan, M. C., Vinay, S., & Akshit, S. (2020). Land allocation model using cellular automata to understand housing demand and supply. *Spatial Information Research*, 29, 339–351. <https://doi.org/10.1007/s41324-020-00350-w>
3. Chandan, M. C., Nimish, G. & Bharath, H. A. (2020). Analysing spatial patterns and trend of future urban expansion using SLEUTH. *Spatial Information Research*, 28(1), 11–23. <https://doi.org/10.1007/s41324-019-00262-4>
4. Bharath, H. A., Chandan, M. C., & Nimish, G. (2019). Assessing land surface temperature and land use change through spatio-temporal analysis: A case study of select major cities of India. *Arabian Journal of Geosciences*, 12(11). <https://doi.org/10.1007/s12517-019-4547-1> Impact Factor: 0.86
5. Bharath, H. A., Chandan, M. C., Vinay, S., & Ramachandra, T. V. (2018). Modelling urban dynamics in rapidly urbanising Indian cities. *The Egyptian Journal of Remote Sensing and Space Science*, 21(3), 201–210. <https://doi.org/10.1016/j.ejrs.2017.08.002> Cite Score: 4.89
6. Bharath, H. A., Vinay, S., Chandan, M. C., Gouri, B. A., & Ramachandra, T. V. (2018). Green to gray: Silicon Valley of India. *Journal of Environmental Management*, 206, 1287–1295. <https://doi.org/10.1016/j.jenvman.2017.06.072> Impact Factor: 4.005
7. Bharath, H. A., Chandan, M. C., Vinay, S., & Ramachandra, T. V. (2017). Modelling the growth of two rapidly urbanizing Indian Cities. *Indian Journal of Geomatics*, 11(2), 28–46.

Book Chapters:

1. Chandana, S., Hegde, A., Pruthviraj, U., & Chandan, M. C. (2024). Examining the effects of vented dams on land use and land cover in the Shambhavi Catchment: a multitemporal sentinel imagery analysis. *Developments in Environmental Science*, 16, 431–454. <https://doi.org/10.1016/B978-0-443-23665-5.00018-1>
2. Chandan, M. C., Nimish, G., & Bharath, H. A. (2021). Analyzing and Predicting Urban Expansion and Its Effects on Surface Temperature for Two Indian Megacities: Bengaluru and Chennai. In: Sharma, P. (Ed.) *Geospatial Technology and Smart Cities* (pp. 93–116). Springer, Cham. https://doi.org/10.1007/978-3-030-71945-6_6
3. Prakash, P. S., Nimish, G., Chandan, M. C., Bharath, H. A. (2021). Urbanization: Pattern, Effects and Modelling. In: Bandyopadhyay, M., et al. (eds) *Machine Learning Approaches for Urban Computing. Studies in Computational Intelligence*, (pp. 1–21), vol 968. Springer, Singapore. https://doi.org/10.1007/978-981-16-0935-0_1
4. Bharath, H. A., Nimish, G., & Chandan, M. C. (2020). Exposition of spatial urban growth pattern using PSO-SLEUTH and identifying its effects on surface temperature. In: Verma, P. et al. (Eds.) *Urban Ecology* (pp. 49–68). Elsevier. <https://doi.org/10.1016/b978-0-12-820730-7.00004-5>
5. Ramachandra, T. V., Bharath, H. A., Vinay, S., & Chandan, M. C. (2020). Simulation and Modelling the Urban Dynamics in Bangalore. In: Rukmana, D. (Ed.) *The Routledge Handbook of Planning Megacities in the Global South*. New York: Routledge. <https://doi.org/10.4324/9781003038160>
6. Chandan, M. C., Bharath, H. A., & Ramachandra, T. V. (2020). Four book chapters. In: Bharath, H. A., & Ramachandra, T. V. (Eds.) *Urban Growth Patterns in India: Spatial Analysis for Sustainable Development*, first edition. Boca Raton, FL: CRC Press. <https://doi.org/10.1201/9780429275319>
7. Bharath, H. A., Chandan, M. C., Vinay, S., & Ramachandra, T. V. (2018). Urbanization in India: Patterns, Visualization of Cities, and Greenhouse Gas Inventory for Developing an Urban Observatory. In: Weng, Q., Quattrochi, D. & Gamba, P. (Eds.) *Urban Remote Sensing*, second edition (pp. 151–171). Boca Raton, FL: CRC Press. <https://doi.org/10.1201/9781138586642>

Conference Papers:

1. Chandan, M. C., Shreyanka, M., Nikitha, K., Tejashvi Swamy, Pramath Rathithara H. P., Kul Vaibhav Sharma (2024). Mysuru 2034: An Integrated Geoinformatics Approach for Real Estate Valuation and Urban Growth. Paper presented at FOSS4G Asia 2024 conference, Srinakharinwirot University, Bangkok, Thailand, 15–18 December, 2024.
2. Chandan, M. C., Pooja, K., Pratham, G., Vickey, R. H., Prithvi Raj, G. S. (2024). Predictive Analysis of LULC Dynamics for Area Under Submergence and its Environmental Impacts for the Mekedatu Reservoir. Paper presented at FOSS4G Asia 2024 conference, Bangkok, Thailand, 15–18 December, 2024.

3. Gireesh, A. B., & Chandan, M. C. (2024). Estimation of Groundwater Potential Zones in Southern Dry Agro-Climatic Area Using Geoinformatics and AHP Technique. In: Mesapam, S., et al. (eds) *Developments and Applications of Geomatics. DEVA 2022. Lecture Notes in Civil Engineering*, vol 450. Springer, Singapore. https://doi.org/10.1007/978-981-99-8568-5_14
4. Suhas, S., Bhavani, V., Vishwanath, B. M., Krishna, R., Chandan, M. C. (2024). Urban Dynamics and Impact Assessment of Bengaluru–Mysuru Expressway Corridor. In: Mesapam, S., et al. (eds) *Developments and Applications of Geomatics. DEVA 2022. Lecture Notes in Civil Engineering*, vol 450. Springer, Singapore. https://doi.org/10.1007/978-981-99-8568-5_38
5. Chandana, S. & Chandan, M. C. (2023). Hydrological Implications of LULC Changes in the Netravathi River Basin: Insights From SWAT Modeling and Machine Learning Techniques. *IEEE India Geoscience and Remote Sensing Symposium (InGARSS)*, IIIT Bangalore, 10–13 December, 2023. <https://doi.org/10.1109/InGARSS59135.2023.10490324>
6. Madumita, D., Prakash, P. S., Chandan, M. C., Bharath, H. A. (2022). Land-use Change Dynamics and Automated Feature Extraction Using High-resolution Satellite Imagery. *Research for Transport and Logistics Industry (R4TLI) – 2022*, Colombo, Sri Lanka, Virtual Conference: 27 August, 2022. [Best Paper Award](#)
7. Rajeshwari, N., Manasa, G., Meghraj, S., Nikesh, B. C., Vedaprada, R., & Chandan, M. C. (2021). Spatio-Temporal Dynamics of Chamarajanagar Region, Karnataka. Paper presented at [FOSS4G Asia 2021](#), Kathmandu University, Dhulikhel Nepal, Virtual Conference: 01–02 October, 2021.
8. Sushma, M. N., Malavika Prakash, Pratheepa, H. D., Imtiting Kichu, & Chandan, M. C. (2021). Developing Spatial Data Visualization System Using Open Source Tools: A Case of Mysuru City, Karnataka. Paper presented at [FOSS4G Asia 2021](#), Dhulikhel Nepal, Virtual Conference: 01–02 October, 2021.
9. Bhavani, V., Suhas, S., Bharath Kumar, D. P., Vishwanatha, B. M., & Chandan, M. C. (2021). Web based Spatial Planning and Decision Support System. Paper presented at [FOSS4G Asia 2021](#), Dhulikhel Nepal, Virtual Conference: 01–02 October, 2021.
10. Abhimanyu, S., Chandan, M. C., & Bharath, H. A. (2020). Urban Growth Analysis and Modelling Based on Socio-Economic Agents Using Cellular Automata. *IEEE International India Geoscience and Remote Sensing Symposium 2020*, Ahmedabad, India, Virtual: 02–05 December, 2020.
11. Chandan, M. C., Abhimanyu, S. & Bharath, H. A. (2020). Land Use Analysis and Modelling Based on Agents Using Cellular Automata. *41st Asian Conference on Remote Sensing*, Deqing, China, Virtual: 09–11 November, 2020.
12. Chandan, M. C., Aadithyaa, J. S., & Bharath, H. A. (2020). Integration of Genetic Algorithm and Agent Based Model to Visualize Near Realistic Sustainable Urban Growth. *2020 IEEE International Geoscience and Remote Sensing Symposium*, Hawaii, USA, Virtual: 26 September – 02 October, 2020.
13. Chandan, M. C., & Bharath, H. A. (2019). Assessing Spatial Forms of Urban Expansion Through Spatio-Temporal Metrics and Modelling Future Trends. *The International Conference on Future Cities*, IIT Roorkee: 11–13 December, 2019.
14. Nimish, G., Chandan, M. C., & Bharath, H. A. (2019). Relationship between Urban Land Use Dynamics and Land Surface Temperature. *5th International Conference on Countermeasures to Urban Heat Islands (IC2UHI)*, Hyderabad, India: 2–4 December, 2019.
15. Chandan, M. C., Aadithyaa, J. S., Prakash, P. S., & Bharath, H. A. (2019). Machine Learning for Building Extraction and Integration of PSO with SLEUTH for Urban Growth Pattern Visualisation. *55th ISOCARP World Planning Congress*, Jakarta-Bogor, Indonesia: 9–13 September, 2019.
16. Chandan, M. C., & Bharath, H. A. (2019). Quantitative Measurement, Analysis of Land Use Change through Spatio-Temporal Pattern and Modelling. *16th International Conference on Computers in Urban Planning and Urban Management*, Wuhan, China: 8–12 July, 2019.
17. Akshit, S., Chandan, M. C., Bharath, H. A. (2019). Housing Allocation Model to Understand Housing Demand and Supply. *49th Annual Conference of Urban Affairs Association*, Los Angeles, California: 24–27 April, 2019.
18. Bharath, H. A., Chandan, M. C., Nimish, G. (2018). Addressing sustainable agenda challenge through analysis of LST, GHG emissions and visualisation of urban growth in Megacities of India. Abstract [GH22A-09] presented at *2018 Fall Meeting, AGU*, Washington, D.C.: 10–14 December, 2018.
19. Chandan, M. C., Nimish, G., Bharath, H. A. (2018). Analyzing Urban Spatial Patterns and Trend of Future Urban Expansion Using SLEUTH. Paper presented at *FOSS4G Asia 2018 conference*, Moratuwa, Sri Lanka: 2–5 December, 2018.
20. Chandan, M. C., Bharath, H. A. (2018). Analysis and modelling of impervious land-use expansion using remote sensing and GIS in Coimbatore, India. *Biennial Symposium–Lake 2018*, Moodbidri: 22–25 November, 2018.

21. Nimish, G., **Chandan, M. C.**, Bharath, H. A. (2018). Understanding Current and Future Land use Dynamics with Land Surface Temperature Alterations: A Case Study of Chandigarh. *ISPRS Ann. Photogramm. Remote Sens. Spatial Inf. Sci.*, IV-5, 79–86. <https://doi.org/10.5194/isprs-annals-IV-5-79-2018>
22. **Chandan, M. C.**, & Bharath, H. A. (2018). Modelling Urban transition using Cellular Automata based SLEUTH modelling. In *2018 IEEE Symposium Series on Computational Intelligence (SSCI)*, 1656–1663. <https://doi.org/10.1109/SSCI.2018.8628940>
23. Gaurav, S., **Chandan, M. C.**, Dharini, J., Bharath, H. A. (2018). Combined Spatial Multi-Criteria Approach for Assessing and Mapping Urban Flood Vulnerable Zones in Capital Region of India. *IEEE International Conference for Convergence in Technology*, Pune: 6–8 April 2018.
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32. Chandramouli, P. N., Sumaraj, Madhushree, A. R., **Chandan, M. C.**, Manoj, K. G. (2011). Estimation of retention parameters using pressure plate extractor data. *National Conference on Recent Developments in Civil Engineering*, Vidya Vikas Institute of Engineering & Technology, Mysore, Karnataka.

Annexure – B

RESEARCH GUIDANCE

Ph.D. Research Supervision

Sl. No.	Name of Scholar	Ph.D. Title/Research Area	Full Time/ Part Time	Date of Registration	Date of Viva Voce
1	Bhramarambha S (257WO001)	Remote Sensing-Based Agriculture Yield Estimation	FT	19-06-2025	--
2	Jubina C K (257WO002)	Impact of Climate Change on Urban Flood Dynamics	FT	17-06-2025	--
3	Arun M O (257WO500)	Geoinformatics-Based Performance Evaluation of Water Supply Projects in Tier-2 Indian Cities	PT	19-06-2025	--
4	Sushmitha G S (257WO501)*	Spatiotemporal Analysis and Prediction of Shoreline Dynamics using Geoinformatics	PT	19-06-2025	--

Guidance for M.Tech. Dissertation/Project Works

Sl. No.	Student Name	Dissertation Title	Month, Year
Dissertations submitted at National Institute of Technology Karnataka, Surathkal			
1	Abhinav Kumar (242GF001)	Spatiotemporal Dynamics of Urban Development along the Ahmedabad–Mumbai Industrial Corridor	June, 2026
2	Prajwal Hiwale (242GF006)	Identification of Minerals and Ores by the Use of Hyperspectral Remote Sensing	--
3	P. Sourav (242GF013)	Impact of LULC change on Inflow of Malampuzha Dam using Hydrological Modelling and GIS	--
4	Shellma R. (242GF014)	Machine-Learning Based Crop Residue Burn Mapping Using Sentinel-2 MSI and Landsat 8/9 OLI Imagery	June, 2026
Dissertations submitted at The National Institute of Engineering, Mysuru to the VTU, Belagavi.			
1	Gireesh A. Binjawadagi (4NI20CHY03)	Applications of Machine Learning Techniques in Ground Water Potential Mapping	July, 2022
2	Chandana S. (4NI21CHY04)	Hydrological Impact Assessment of Netravathi Catchment, Dakshina Kannada, Karnataka, India	Sep, 2023
3	Apoorva R. Mathad (4NI21CHY01)*	Urban flood damage assessments: a case study of Bengaluru, India	Sep, 2023
Dissertations submitted at IIT Kharagpur			
1	Gaurav Singh (16ID60R16)*	Urban Flood Vulnerability Zoning of Delhi Using Remote Sensing and GIS	Apr, 2018
2	Akshit Shah (17ID60R06)*	Spatio-Temporal Dynamics of Housing Demand and Supply in Ward-E, Mumbai	Apr, 2019
3	Abhimanyu D (18ID60R16)*	Exposition of Urban Dynamics and Modelling of Urban Growth	Apr, 2020
4	Mohit Verma (19ID60R23)*	Designing a Web-based Spatial Urban Decision Support System	Apr, 2021

* Co-Guided.

Guidance for B.Tech. Project Works

Sl. No.	Student Name	Dissertation Title	Month, Year
Dissertations submitted at National Institute of Technology Karnataka, Surathkal			
1	Adarsh Kumar (221CV103) Amardeep Meena (221CV108) Sarathak Hegde (221CV142)	Spatiotemporal Dynamics of LULC, LST and Vegetative Indices of Mangalore District	May, 2026
2	Abhishek (231CV204) Megharaj S. Naik (231CV131) Rohith P. (231CV143)	Agriculture Yield Prediction Using Remote Sensing Based Models	Ongoing
3	C S Abhishek (231CV115) Darshan Gowda T (231CV117) Avinash (231CV112)	Urban Flood Modelling using HEC-RAS	Ongoing
Dissertations submitted at The National Institute of Engineering, Mysuru to the VTU, Belagavi.			
1	Nameesh U H (4NI21CV058) Pavan S (4NI21CV067)	Geospatial Analysis for the suitability of Secondary Airport Location in Bengaluru-Nelamangala Region	April, 2025

	Vishnuprakash S (4NI22CV433) Shashank H M (4NI22CV426)		
2	Pooja K (4NI21CV406) Pratham G. (4NI20CV080) Vickey R. Hegade (4NI20CV117) Prithviraj (4NI20CV083)	Predictive Analysis of LULC Dynamics for Area Under Submergence and its Environmental Impacts for the Mekedatu Reservoir	June, 2024
3	Shreyanka M (4NI20CV097) Nikitha K (4NI20CV074) Tejashvi Swamy (4NI20CV110) Pramath H P (4NI20CV079)	Mysuru 2034: An Integrated Geoinformatics Approach for Real Estate Valuation and Urban Growth	June, 2024
4	Mohith B R (4NI19CV052) Sumanth G R (4NI20CV410) Arunkumar D R (4NI19CV011) Thanushree V Y (4NI19CV115)	Agent Based Urban Growth Prediction for Sustainable Development – A Study on Mysore District	June, 2023
5	Suhas S (4NI18CV104) Vishwanatha B M (4NI18CV115) Bhavani V (4NI18CV014) Ruthvik Krishna (4NI15CV093)	Urban Dynamics and Impact Assessment of Bengaluru-Mysuru Expressway Corridor	Apr, 2022