

**Dr. Reshma Raskar-Phule**  
**M.Tech. & Ph.D (Remote Sensing Technology)**

Email: [r\\_raskar@spce.ac.in](mailto:r_raskar@spce.ac.in)

Contact Number: +91 99696 83997

ORCID iD: 0000-0003-1229-7991



Assistant Professor, Civil Engineering Department  
Bharatiya Vidya Bhavan's Sardar Patel College of Engineering,  
Andheri (w), Mumbai 400058

**Short Introduction:**

I, Dr. Reshma Raskar-Phule, is an accomplished academic and dedicated educator, currently serving as an Assistant Professor in the Department of Civil Engineering at a renowned autonomous institute in Mumbai, Bharatiya Vidya Bhavan's Sardar Patel College of Engineering. With a passion for teaching and research, after earning my doctoral degree in Civil Engineering from a prestigious institution, Indian Institute of Technology Bombay, I embarked on a research career focused on geospatial technologies and its applications in disaster management, climate change, and sustainable land use planning.

I had been an active participant in academic conferences and symposiums, for which travel grants and funds were provided by University Grants Commission (UGC) and World Bank funded Technical Education Quality Improvement Programme (TEQIP), where I was given chance to present my research findings to fellow experts in the field of geospatial technologies.

Beyond my academic pursuits, I am also the Outreach network coordinator for the Indian Institute of Remote Sensing (IIRS) – Indian Space Research Organization (ISRO) for conducting their outreach programs in collaboration with my institute. Along with, I am also a Resource person registered at National Geospatial Program (erstwhile NRDMS) of the Department of Science and Technology, Government of India from the year 2016.

I have also delivered workshops and seminars on topics of geospatial technology, disaster management, sustainable development in private colleges and universities as guest speaker and as a visiting faculty.

I have been awarded as “Dr. Sarvapalli Radhakrishnan Distinguished Assistant Professor Award in Remote Sensing Technology” by Center for Professional Advancement (CPACE) on National Teacher's Day 2023.

I have been awarded as “Innovative Technologist and Best Professor” in the 18th International Conference on Challenges & Opportunities in Research held at AIT, Thailand from 26-27 December 2019.

## **Publications:**

### *In Refereed International Journals:*

1. Reshma Raskar Phule and Deepankar Choudhury (2017); "Seismic reliability-based analysis and GIS mapping of cyclic mobility of clayey soils of Mumbai city, India", *Natural Hazards*, (ISSN: 0921-030X, Impact Factor: 1.746/2015) Springer, Netherlands, Vol. 85, No. 1, pp. 139-169, doi: 10.1007/s11069-016-2570-z
2. Reshma R. Phule and Deepankar Choudhury (2018); "Assessing and mapping seismic liquefaction hazard, vulnerability, and risk of the transportation infrastructure of Mumbai city, India". In *Geotechnical Earthquake Engineering and Soil Dynamics V: Seismic Hazard Analysis, Earthquake Ground Motions, and Regional-Scale Assessment*, Geotechnical Special Publication No. GSP 291, ASCE, Edited by Scott J. Brandenburg and Majid T. Manzari (ISBN 978-0-7844-8146-2), Reston, VA, USA, pp. 658-666. doi: 10.1061/9780784481462.064
3. Bala Subramaniam S, Reshma R (2021) Planning and Mapping of a Multi Modal Integrated Transportation System for Metro Station at Dadar, Mumbai India by Using Open-Source GIS. *J Civil Engg ID* 2(2):7-17.

### *In Refereed National Journals:*

1. Reshma Raskar-Phule and Deepankar Choudhury (2015); "Seismic liquefaction hazard zonation and contour maps for Mumbai city using open source GIS", *Disaster Advances*, (ISSN: 0974-262X, Impact Factor: 2.272/2012) India, Vol. 8, No. 7, pp. 20-33.
2. Deepankar Choudhury, V. S. Phanikanth, Sumedh Y. Mhaske, Reshma R. Phule and Kaustav Chatterjee (2015); "Seismic liquefaction hazard and site response for design of piles in Mumbai city", *Indian Geotechnical Journal*, (ISSN: 0971-9555), Springer, India, Vol. 45, No. 1, pp. 62-78. doi: 10.1007/s40098-014-0108-4. (Print Media Coverage in National News Paper 'Hindustan Times' on April 28, 2015)

### *In National/International Conference/Symposium/Seminar Proceedings:*

1. Reshma Raskar-Phule (2009); "Use of Geomatic Technology for Disaster Management (Tsunami Disaster Damage Detection - Case Study In Sri Lanka)", *Proc. of Second India Disaster Management Congress*, NIDM, New Delhi, India
2. Reshma Raskar – Phule, Prajas Kurangale, Prathamesh Khot, and Disha Kohale (2015); "Some Case Studies on Application of Remote Sensing (RS) and Geographic Information system (GIS) in Civil Engineering", *Proc. of Indian Congress of Civil Engineers (ICCE-2015)*, One day National Conference, December 5, 2015, Bangalore, India
3. Reshma Raskar-Phule and Deepankar Choudhury (2015); "Vulnerability mapping for disaster assessment using ArcGIS tools and techniques for Mumbai city, India", *Proc. of 16th ESRI India User Conference*, December 3-4, 2015, New Delhi, India
4. Reshma Raskar-Phule and Kshitija Nadgouda (2016); "Spatial Variability Mapping of N value of soils of Mumbai City using ArcGIS", *Proc. of ESRI Regional User Conference*, August 4-5, 2016, Hyderabad, India
5. Aashay Papnoi, Aditya Surve, Pranay Silgiri, Ashutosh Wankhede, Reshma Raskar-Phule

- (2017); “Transportation Infrastructure Vulnerability and Risk mapping for Metro city of Navi Mumbai, India”, Proc. of ESRI User Conference, January 18-20, 2017, New Delhi, India
6. Reshma R. Phule and Deepankar Choudhury (2018); “Assessing and mapping seismic liquefaction hazard, vulnerability, and risk of the transportation infrastructure of Mumbai city, India”. In Geotechnical Earthquake Engineering and Soil Dynamics V: Seismic Hazard Analysis, Earthquake Ground Motions, and Regional-Scale Assessment, Geotechnical Special Publication No. GSP 291, ASCE, Edited by Scott J. Brandenburg and Majid T. Manzari (ISBN 978-0-7844-8146-2), Reston, VA, USA, pp. 658-666. doi: 10.1061/9780784481462.064 (received travel grants from University Grants Commission (UGC))
  7. Balasubramaniam S., Reshma Raskar-Phule (2020), “Planning and Mapping of a Multi Modal Integrated System for Metro Station at Dadar, Mumbai India by using Open source GIS; International conference and exhibition on Building Materials and Construction Technologies (BMCT), April 20-22, 2020, Dubai (postponed to 2021 due to COVID 19).
  8. Dr. R. R. Phule and S. Jadhav (2021), “Feasibility Study of Charging Stations for Electric Vehicles (EVs) using Geographic Information System (GIS) for an Urban City”, in conference proceedings of 5th Environment and Social Development Association Conference (ESDA CON) 2021 (Annual International Conference of ESDA), 26-27 June 2021, New Delhi India (held online)
  9. Dr. Raskar-Phule, S. Jamnik, S. Niyazi, P. More, U. Pakhale, P. Vanam (2023), “Use of Vertical Axis Wind Turbine (VAWT) as a Sustainable Energy Solution for the Metro Lines of Mumbai City, India”, in conference proceedings of ILUS - International Land Use Symposium 2023 on Urban Analytics for Transforming Cities and Regions: Tools, Methods and Applications, 3-6 October 2023, CEPT University in Ahmedabad, India
  10. Dr. Raskar-Phule and Akshat Kumar (2023), “Sustainable Approach of Estimation and Mapping of Safe Bearing Capacity of Soils in an Urban City like Mumbai by using OS Q-GIS” in the ISG-ISRS National Symposium 2023 on Exploring Geospatial Ecosystems, Trends and Innovations, 28 -30 November 2023, organized by ISG & ISRS, co-hosted by SIG and C-DAC Pune, Symbiosis International (Deemed University) Pune, India *[won the Best paper award in Senior Category]*

#### *International Interactions:*

1. Reshma Raskar-Phule (2009) "Real Time Computation of Precipitable Water Vapour Using Global Positioning System - Data Quality Improvement", Proc. of GPS/GNSS 2009, 2009 International Symposium on GPS /GNSS, November 4-6, 2009, ICC, Jeju, Korea.
2. Reshma Raskar-Phule and Deepankar Choudhury (2017); “Seismic liquefaction hazard-vulnerability analysis and mapping of existing important buildings of Mumbai city, India”, Proceedings of the 19th International Conference on Soil Mechanics and Geotechnical Engineering (19th ICSMGE, Seoul 2017), September 17-22, 2017, COEX Convention Centre, Seoul, South Korea, pp. 3319-3322.
3. Reshma R. Phule and Deepankar Choudhury (2018); “Assessing and mapping seismic liquefaction hazard, vulnerability, and risk of the transportation infrastructure of Mumbai city, India”. In Geotechnical Earthquake Engineering and Soil Dynamics V: Seismic

Hazard Analysis, Earthquake Ground Motions, and Regional-Scale Assessment, Geotechnical Special Publication No. GSP 291, ASCE, Edited by Scott J. Brandenberg and Majid T. Manzari (ISBN 978-0-7844-8146-2), Reston, VA, USA, pp. 658-666. doi: 10.1061/9780784481462.064 (received 100% travel grants from University Grants Commission (UGC))

**Reviewer / Editor in National / International Journals:**

1. On Editorial Board as Section Editor for Journal “Earthquake”, Arts and Science Press Pte. Ltd, Singapore.
2. Elsevier Reviewer for Journal Heliyon, All-science, open access journal, Cell Press family, USA.
3. Editorial Board Member of Journal of Civil, Construction and Environmental Engineering(JCCEE) ISSN Print: 2637-3882; ISSN Online: 2637-3890, <https://www.sciencepg.com/j/jccee>, from July 23, 2022 to July 23, 2024.
4. Reviewer at Journal of Indian Society of Remote Sensing (JISRS) Electronic ISSN 0974-3006 Print: ISSN 0255-660X <https://link.springer.com/journal/12524> from March 2024.

**Contributions:**

1. Indian Institute of Remote Sensing (IIRS) - Indian Space Research Organization (ISRO) Network Coordinator, SPCE Network Center - from 2019.
2. Resource person at National Geospatial Program (erstwhile NRDMS) of the Department of Science and Technology, Government of India – from 2016.
3. Visiting faculty for MSc. Programme (Mumbai University) - Biodiversity and Wildlife Conservation and Management at Bhartiya Vidya Bhavan’s College, Andheri west, Mumbai.
4. Conducting guest lectures, workshops and seminars on Geospatial / Geo-informatics technologies and Disaster management in various Institutes.
5. Consultancy works in the areas of remote sensing, GIS, seismic liquefaction and cyclic mobility, sustainable engineering and technology.