



EDUCATION

Program	Institution	%/CGPA	Year
PhD (Civil Engineering)	Indian Institute of Technology (IIT) Madras	8.71/10	2021
B.Tech (Civil Engineering)	Indian Institute of Technology (IIT) Guwahati	8.58/10	2014

DOCTORAL RESEARCH PROJECT

Doctoral Research Project: **Seismic soil-structure interaction response of inelastic structures**

Advisor: Prof. S R Satish Kumar, IIT Madras

(July 2014 – May 2021)

- Evaluation of inelastic seismic response of structures with and without soil-structure interaction
- Development of a procedure to estimate seismic demand on inelastic structures considering soil-structure interaction, which can be readily used in regular seismic design practice

PROFESSIONAL EXPERIENCE

Assistant Professor in Department of Civil Engineering, IIT (BHU) Varanasi

(March 2022 – Present)

- Teaching:
 - Structural Mechanics II (3rd year UG) Concrete Technology Laboratory (2nd year UG)
 - Basic Surveying (1st year UG) Surveying Laboratory (1st year UG)
- Research: Earthquake Engineering

Ad-hoc Faculty in Department of Civil Engineering, NIT Andhra Pradesh

(July 2021 – March 2022)

- Teaching:
 - Theory of Structures- I (3rd year UG) Prestressed Concrete (4th year UG)
 - Building Materials and Concrete Technology; Concrete Technology Laboratory (2nd year UG)
- Research: Lifecycle cost assessment in passive buildings

Project Associate at Department of Civil Engineering, IIT Madras

(August – December 2019)

- Assessment of structural stability of existing passenger platform shelters for provision of solar panels, for Southern Railway
- Laboratory testing of galvanized roofing sheets for capacity in suction against wind loads

Project Associate at Chennai Urban Resilience Program

(May – July 2019)

- Summer program at IIT Madras in collaboration with University of British Columbia, Cambridge University and Yale- NUS College, aimed at enhancing resilience of Chennai city
- Team project on civic engagement in solid waste management, water conservation, traffic congestion

PROFESSIONAL AFFILIATIONS

- Young Professional Member at Earthquake Engineering Research Institute (EERI), Oakland
- Graduate Member at the Institution of Structural Engineers (IStructE), London
- Lifetime Member at Indian Concrete Institute, Chennai
- Mail-list Member at the National Information Centre of Earthquake Engineering, IIT Kanpur
- Reviewer at Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences
- Reviewer at Geophysical Journal International, a peer reviewed journal by Oxford University Press
- Reviewer at Earthquake Engineering and Engineering Vibrations, a peer reviewed journal by Springer

RESEARCH INTERESTS

- Earthquake Engineering
- Soil-Structure Interaction
- Rupture-to-Rafters Simulations
- Dynamics of Offshore Wind Turbine Structures
- Machine Learning Applications in Structural Engineering

PUBLICATIONS

Journal Publications

- **Vishwajit Anand** and S R Satish Kumar (2022). Sensitivity of strength reduction factor for structures considering soil-structure interaction. *Structures*, 39, 593-606.
- **Vishwajit Anand** and S R Satish Kumar (2021). Evaluation of seismic response of inelastic structures considering soil-structure interaction. *Innovative Infrastructure Solutions*, 6(2), paper 83.
- **Vishwajit Anand** and S R Satish Kumar (2020). Seismic soil-structure interaction response of elastic and inelastic moment resisting framed structures on embedded rafts. *Journal of Structural Engineering (Madras)*, 47(4), pp. 344-361.
- **Vishwajit Anand** and S R Satish Kumar (2018). Seismic soil-structure interaction: A state-of-the-art review. *Structures*, 16, pp. 317-326.

Conference Publications

- **Vishwajit Anand** and S R Satish Kumar (2022). Seismic performance of semi-rigid steel frames considering soil-structure interaction. Indian Structural Steel Conference, IIT Hyderabad.
- **Vishwajit Anand** and S R Satish Kumar (2018). Elastic seismic response of moment resisting framed structures with soil-structure interaction. *11th National Conf. on Earthquake Engineering*, Los Angeles.
- **Vishwajit Anand** and S R Satish Kumar (2017). Effects of engineering design parameters on elastic soil-structure interaction response of moment resisting framed structures. *Indian Geotechnical Conference*, Guwahati.
- **Vishwajit Anand** and S R Satish Kumar (2016). Analytical soil-structure interaction formulations in frequency domain for structures founded on flexible bases. *Structural Engineering Convention*, Chennai.
- **Vishwajit Anand** and Vimal Kumar (2013). Urban building model in Gangetic plains. *National Conference on Environment Friendly Sustainable Construction- Need of the Hour*, Patna.
- **Vishwajit Anand** and Arindam Dey (2012). Estimation of filter dimensions for a homogeneous earth dam resting on impervious foundation based on basic seepage analyses. *4th International Congress on Computational Mechanics and Simulation*, Hyderabad.

Book Chapters

- **Vishwajit Anand** and Sumit Kumar (2016). Groundwater management- Sustainability & Methodology. *In Sarma et al., Urban Hydrology, Watershed Management & Socio-Economic Aspects*, 73, 135-143.

COMPUTATIONAL SKILLS

- Skills: Machine Learning, Numerical Regression
- Software Packages: AutoCAD, SAP2000, ETABS, STAAD.Pro, ABAQUS
- Programming Skills: C, MATLAB, Octave, Python, OpenSEES

AVAILABLE OPPORTUNITIES

If you are a prospective PhD candidate interested to join my research group at IIT BHU, I encourage you to contact me through channels at top of this resume, with a Statement of Purpose (SOP), highlights from past research and a resume. If you are found suitable, you will be contacted at the earliest.