

NAVEEN RAGU RAMALINGAM

PHD CANDIDATE

PERSONAL PROFILE

I am a committed researcher with excellent communication skills. I have experience in modelling natural hazards and their impact on business and society in academic and commercial settings.

AWARDS & GRANTS

- Italy MIUR PhD Scholarship (2020-2024)
- Erasmus+ Traineeship Mobility Grant (2023)
- EGU Early Career Scientist Travel Grant(2022)
- AOGS Comps Conference Waiver (2022)
- British Council IELTS English Test (2019)
- India MHRD GATE Master's Scholarship (2012-2014)

MEMBERSHIP AND ASSOCIATIONS

- Global Tsunami Model(GTM)
- Global Flood Partnership(GFP)
- Earthquake Engineering Field Investigation Team (EEFIT)
- EGU Division on Natural Hazards (NH)
- International Society of Catastrophe Managers(ISCM)

RECENT PROJECTS

- EU COST Action - AGITHAR Accelerating Global Science in Tsunami Hazard and Risk Analysis (2019 - 2023)
- Development of IUSS HPC Data Centre funded by Regione Lombardia (2021-2022)

LANGUAGES

- English (Professional proficiency)
- Hindi (Native speaker)
- Tamil (Native speaker)
- French and Italian (Basic)

OTHER INFORMATION

naveen.raguramalingam@gmail.com
via Luigi Porta 10, Pavia 27100 (PV), Italy
*Holder of a long-term EU residence permit
(Spouse of French national)*

EXPERIENCE

PhD Candidate in Understanding and Managing Extremes
University School for Advanced Studies - IUSS Pavia, Italy
(2020-2024)

- Develop **machine learning** methods for predicting tsunami inundation.
- Probabilistic tsunami **hazard assessment** and tsunami **forecasting** using machine learning **surrogates**.
- Prepare research publications and dissemination at conferences.
- **Research periods** at Norwegian Geotechnical Institute(NGI) Oslo, Istituto Nazionale di Geofisica e Vulcanologia(INGV) Rome and Global Earthquake Model (GEM) Foundation Pavia.

Senior Consultant, Resinsurance Solutions
Aon - Impact Forecasting, Bangalore, India
(2014-2020)

- Developing natural catastrophe loss models and research-intensive tasks for **re/insurance pricing and disaster risk financing** with in-house and external client catastrophe managers.
- Hydrodynamic, hydrologic modelling, and **nation-scale** probabilistic hazard & risk assessment for **flood, storm surge, and tsunami** in the APAC region (India, Thailand, Malaysia, Vietnam, and Japan).
- Realtime **event response**, post-event **field survey** for flood events, client and sales support in the APAC region.

Project Student - Internship
National Remote Sensing Centre, Hyderabad, India
(2013-2014)

- Developing **hydrological models** using VIC macroscale model.
- Conduct **sensitivity analysis** and **calibrate** the near real-time hydrological model developed for India used in **national scale water-balance monitoring**.

EDUCATION

Jerusalem College of Engineering, Anna University
Chennai, India
Bachelor of Engineering in Civil Engineering
(2008 - 2012)

Thesis: A Comparative Study on the Properties of Manufactured Sand and Natural River Sand

College of Engineering Guindy, Anna University,
Chennai, India
Master of Engineering in Hydrology and Water Resources
Engineering (2012 - 2014)

Thesis: Sensitivity Analysis of VIC Model Parameters and Estimation of Water Balance Components for the Wainganga Sub Basin.

SKILLS

- Machine Learning – Autoencoder, NN, Pytorch
- Hydrodynamic and hydrologic modelling – GeoCLAW, TUFLOW, Tsunami-HySEA, Delft3D, SFINCS, VIC.
- Programming – Python, R, Git and Latex
- Computing - Linux, Windows, HPC(SLURM), Docker
- GIS - ArcGIS, QGIS, Folium Maps
- Catastrophe modelling - ELEMENTS, OpenQuake, Oasis LMF



<https://www.linkedin.com/in/naveen-ragu/>



<https://orcid.org/0000-0001-8094-763X>



<https://scholar.google.com/citations?hl=en&user=gHiwpu8AAAAJ>



<https://github.com/naveenragur>