# Naveen Ragu Ramalingam, Ph.D. Student in Understanding and Managing Extremes Istituto Universitario di Studi Superiori di Pavia - IUSS Pavia

Mobile: +39-3518348340 | Email: naveen.raguramalingam@iusspavia.it | LinkedIn Profile | ResearchGate Profile |

#### **AREAS OF INTEREST**

Catastrophe model development - floods, storm surge and tsunami, hydrodynamic and hydrological modelling, risk assessment, re/insurance.

#### PROFESSIONAL EXPERIENCE

## SENIOR CONSULTANT, REINSURANCE SOLUTIONS | SEPTEMBER 2014 - NOVEMBER 2020

FLOOD CATASTROPHE MODEL DEVELOPEMENT - IMPACT FORECASTING, AON, BANGALORE.

- → Developing catastrophe models and other research-intensive tasks for re/insurance and DRFI purposes with in-house and external catastrophe managers.
- + Hydrodynamic, hydrologic modelling and nation-wide probabilistic hazard & risk assessment related to flood, storm surge and tsunami in the APAC region India, Thailand, Malaysia, Vietnam and Japan.
- + Project Manager for Impact Forecasting's flood catastrophe model for Malaysia and tsunami model for Japan.
- **★** Realtime event response and post event field survey for flood events in APAC region.
- → Implementation of catastrophe models and testing in the in-house loss calculation platform ELEMENTS and OASIS format.
- **★** Cooperation with research partners like Deltares on projects related to storm surge and tsunami.
- ★ Liasoning and collection of data from govt. hydro-meteorological bodies and other data providers.
- ★ Supporting queries of clients / user group and assisting sales activities.

## INTERN/PROJECT STUDENT | JUNE 2013 - JUNE 2014

WATER RESOURCE MONITORING AND ASSESSMENT DIVISION, NATIONAL REMOTE SENSING CENTRE(NRSC), DEPT. OF SPACE, GOVT. OF INDIA, HYDERABAD.

Developed a hydrological model of Wainganga sub basin using VIC macroscale model. Conducted sensitivity analysis for the parameters of VIC model, helped calibrate the near real-time hydrological model developed for India used in national scale water-balance monitoring.

## **EDUCATIONAL QUALIFICATION**

## PH.D. STUDENT IN UNDERSTANDING AND MANAGING EXTREMES | 2020 -

ISTITUTO UNIVERSITARIO DI STUDI SUPERIORI DI PAVIA, PAVIA.

#### M.ENG. HYDROLOGY AND WATER RESOURCES ENGINEERING | 2012-2014

COLLEGE OF ENGINEERING, GUINDY, ANNA UNIVERSITY, CHENNAI.

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

## **B.ENG. CIVIL ENGINEERING | 2008-2012**

JERUSALEM COLLEGE OF ENGINEERING, ANNA UNIVERSITY, CHENNAI.

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

## **SCHOLARSHIPS/TESTS**

**International English Language Testing System (IELTS):** 01/2019 (Overall band score of 8.0/9.0)

**Graduate Aptitude Test in Engineering(GATE):** Scholarship for Master's Degree (2012-2014) by the Ministry of Human Resources Development (MHRD), Government of India.

#### PRESENTATIONS AND CONFERENCES

Water Future International Conference, Bangalore (2019): Coastal flooding in Vietnam and impact on its deltas.

**Global Flood Partnership Annual Meeting, Guangzhou(2019):** Flood risk assessment from an insurance perspective – Case study of India.

**Impact Forecasting Revealed, Singapore (2017, 2018):** The developments and features related to Impact Forecasting's Japan tsunami model.

### **PUBLICATIONS**

Naveen, R., Raju P.V., Abdul Hakeem K. and Karthikeyan M.S. (May 2014). *Hydrological Modelling of Wainganga Sub basin using Variable Infiltration Capacity Model*. Proceeding of Annual Conference on Innovations and Developments in Civil Engineering (ACIDIC - 2014) at National Institute of Technology Karnataka, Surathkal.

### **SKILLS AND TOOLS**

- + Hydrodynamic and hydrologic modelling TUFLOW, Delft3D, VIC.
- → Programming and data management R, MATLAB, Python, SQL
- **→** GIS tools ArcGIS and QGIS

#### **LANGUAGES**

- ★ English (Professional proficiency)
- → Hindi (Native speaker)
- → Tamil (Native speaker)