Dr. RAJAT KUMAR PANDA

D.O.B - 01/08/1982 Flat No- 404, Adi shakti building, IIT main gate, Powai Bombay

Email: pandarajatkumar@gmail.com

Mobile-+91-9438322673

Skype id- rajatiitb



Teaching Experience

- 1. Working as Research associate in the project LU/LC classification in "SAGE, (Mumbai)" since Feb 2021 till date.
- 2. Worked as an Assistant professor in Jigjiga University (Ethiopia), Water Resources and Irrigation Engineering since Sept-2019 to Oct- 2020.
- 3. Experience of 3 years as an Asst. Professor in Diredawa University (Ethiopia), Civil Engineering Department since Sept 2016-July 2019.
- **4.** 10 months of experience as Asst. Professor in SB Patil college of Engineering, Indapur, Pune (India) in Civil Engineering department since Dec 2015- Sept 2016.

Research experience (completed)

- ➤ Dr. Rajat K. Panda, Tesfu Abebe, Uday Kumar (2020). "Assessment of Baseline Survey for reduction of water quantity of Elbahay Dam". Funded by Water bureau, Jigjiga, conducted as part of Jigjiga University. (Estimated cost of -250,000 Birr).
- Improving the practice of solid waste management in Diredawa city, Ethiopia. (2019)
- Assessment of water supply in Diredawa city, Ethiopia. (2018)
- ➤ Worked on the preparation of Land use and Land cover change study on Sheila study area, India(2008)
- ➤ Worked for three months in a NRSA sponsored project entitled "Urban planning and Management in Salem City Corporation using Remote Sensing and GIS".(2006)

Fellowships

ETH Swiss Federal Institute of Technology Zurich fellowship

International Winter School

Jan 3-27, 2015

Zurich, Switzerland

> Presented a project on water allocation for food and ecosystem health in the Yangi basin in China,

IGCS (DAAD) fellowship

International Summer School

May 25-June 10, 2015

Kiel, Germany

> Prepared a project on "Sustainable water management in Rural Landscapes using SWAT".

BSRS Fellowship

International Summer School

June 15-27, 2015

Bergen, Norway

Participated in the course designed for "Future energy Landscapes" and gave a presentation on Hydropower energy status in India.

Education

IIT Bombay

Doctorate of Philosophy (CGPA: 7.5/10)

Feb, 2016

Dissertation: Water availability and demand assessment of Ghataprabha river basin

Bharathidasan University (Geohydroinformatics using GIS)

M.Tech (CGPA: 7.8/10)

Aug 31, 2006

Geology Department

Trichy, India (IIRS, Dehradun)

> Thesis: Ground water prospecting in part of Giri Valley, Himachal Pradesh; A remote sensing and GIS approach.

Berhampur University (Khallikote College)

M.Sc (Percentage 74.8/100)

Geology Department

Research Experience

Research Associate

¹ May--Nov, 2015. IIT Bombay

² Dec-2006-Mar 2010, IIT Bombay

- Water availability and Demand assessment of Ghataprabha river basin
- Development of drought vulnerable indices for preparedness and mitigation.

Workshop/ Training

- 1 day Virtual webinar on Earth Observation satellites for Social, Environmental and Economic Studies organized by Suresh Gyan Vihar University (26 Sep, 2020.)
- Three day's workshop on Introductory and advanced SWAT workshop organized at Indian Institute of Technology Madras (Dec 30,2013 to Jan 3,2014).
- One-week training program on basics of remote sensing and GIS with SWAT at NIH Roorkee (2013).

- Workshop on Aquifer mapping organized by Centre for Technology Alternatives for Rural Areas, IIT Bombay (2012)
- International conference on snow and Avalanche studies held in the Center of studies in Resources Engineering, IIT Bombay. (2008)
- National workshop on "Resource mapping using GIS, GPS and Remote Sensing "held in the Department of Geography (School of Earth Science), Bharathidasan University, Tiruchirappalli. (2006)
- Two days workshop on "NRDMS Related Spatial Technology for Development Planning "held in the department of Remote sensing, Bharathidasan University, Tiruchirappalli. (2006)

Research interest & Skills

Interests:

- Large scale hydrologic modelling
- Analysis of extreme events including droughts and floods
- Water security
- Application of Remote Sensing data and land surface models to understand the hydrologic changes
- Effect of urban growth on the streamflow.

<u>Skills</u>:

- Remote sensing data analysis using ERDAS Imagine and ENVI for multispectral data like LANDSAT and IRS
- Data analysis using ARCGIS
- Land surface hydrologic modelling with SWAT model.

Handled subjects (B.Sc)and M.Sc

- Applied Hydrology
- Remote sensing and GIS
- Groundwater Hydrology
- Environmental Engineering (water treatment)
- Open channel
- Hydraulics
- Geology
- Disaster Management (Drought, flood)

Publications

• Panda, R.K., Nagarajan, R. (2021) "Land use/ cover classification and accuracy assessment of Ghataprabha river basin using Remote sensing and GIS. International conference on geospatial science for digital earth observation (GSDEO), March 26-27."

- *Panda, R.K., Nagarajan, R. (2013)* "Prioritization of Sub basins of Ghataprabha River Using Morphometric Parameters". *International Journal of Geomatics and Geosciences* (III)-3, ISSN 0976-4380, PP. 605-617.
- *Panda, R.K., Nagarajan, R. (2013)* "Sustainable water-based growth potential of Villages a Geospatial Approach". Proceedings *Internal conference on Water, Waste water & Isotope Hydrology*. Bangalore University
- Panda, R.K., Nagarajan, R.(2013)"Evaluation of Rainfall trend in Ghataprabha River Basin" International Scientific Conference on Engineering and Applied Sciences", Japan.

Reference

I.	Prof. R.Nagarajan	II.	Prof. G.Venkatraman	III.	Prof. M.V.Khire
	CSRE		CSRE		CSRE
	IIT Bombay		IIT Bombay		IIT Bombay
	Ph-022, 2576 7681		Ph- 022, 2576 7686		Ph- 022, 2576 7675