AKSHAY RAJEEV

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RESEARCH INTERESTS

Hydroclimatic Extremes, Earth Observation, Hydrological Modelling, Compound Events

EDUCATION

Master of Technology in Earth System Sciences

2019 - 2021

Indian Institute of Technology (IIT) Gandhinagar, India

CGPA: 8.60/10

Dissertation title: 'On the causes of tropical cyclone driven floods in India'

Advisor: Vimal Mishra, Associate Professor, IIT Gandhinagar

Post Graduate Diploma in Remote Sensing and GIS

2018 - 2019

Indian Institute of Remote Sensing (IIRS-ISRO), Dehradun, India

CGPA: 8.95/10

Specialisation: Atmospheric and Marine Sciences

Dissertation title: 'Assessment of model simulated dust using satellite data'

Advisor: Charu Singh, Scientist-SE, IIRS-ISRO

Master of Science in Applied Geology (5-Year Integrated)

2013 - 2018

Pondicherry University, Puducherry, India

CGPA: 8.61/10

Dissertation title: 'Petrogenesis of Neoproterozoic Granitoids from Sankaridurg:

Constraints from Petrography and Whole-rock Trace Element Study'

Advisor: Rajneesh Bhutani, Professor, Pondicherry University

RESEARCH EXPERIENCE

Research Fellow July 2021 – Present

Indian Institute of Technology (IIT) Gandhinagar, India

Summer Intern May – July 2016

Indian Institute of Technology (IIT) Bombay, India

PUBLICATIONS

Rajeev, A. & Mishra, V. "Increasing risk of compound wind and precipitation extremes due to tropical cyclones in India", (In review)

Rajeev, A. & Mishra, V. "On the causes of tropical cyclone driven floods in India", Weather and Climate Extremes (2022). https://doi.org/10.1016/j.wace.2022.100432

Rajeev, A., Singh, C., Singh, S.K. et al. Assessment of WRF-CHEM Simulated Dust Using Reanalysis, Satellite Data and Ground-Based Observations. J Indian Soc Remote Sens (2021). https://doi.org/10.1007/s12524-021-01328-3

CONFERENCE PRESENTATIONS

Rajeev, A. and Mishra, V.: Compound Events of Tropical Cyclone and Flooding in India, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-15759, https://doi.org/10.5194/egusphere-egu21-15759, 2021.

FELLOWSHIPS & AWARDS

Cash Award for Journal Publication, IIT Gandhinagar

2021

University Scholarship for Integrated M.Sc, Pondicherry University

2013

107Th Rank in the All-India Level Scholarship Examination conducted by the National Council for Development of Education

Silver Medal for National Level Science Olympiad

2004

ACHIEVMENTS

Qualified Graduate Aptitude Test in Engineering (Geology & Geophysics)

2019

Qualified CSIR-UGC National Eligibility Test (Lectureship) in Earth Sciences

2018

TECHNICAL SKILLS

Programming languages and mathematical packages: Matlab, Python

GIS software and tools: ArcGIS (with Python), QGIS, ENVI, Google Earth Engine (Javascript & Python API)

Hydrological modelling: Variable Infiltration Capacity (VIC) Model, RVIC routing model

Geochemical analysis: Whole-rock trace element analysis (ICP-MS), Rb-Sr Geochronology (TIMS)

Others: Geographical Mapping Tool (GMT)

LANGUAGES

Malayalam: Native

English: Fluent (TOEFL Score: 107/120)

Hindi: Proficient
French: Basic
Spanish: Basic

EXTRACURRICULAR ACTIVITIES

- Founding member of the editorial board of the wall magazine Horizons that is functional in the Department of Earth Sciences, Pondicherry University.
- Won several English Story Writing competitions at School and sub-district level.
- Origami

<u>REFERENCES</u>

Dr. Vimal Mishra, Associate Professor

Civil Engineering and Earth Sciences Indian Institute of Technology (IIT) Gandhinagar

Thurst histitute of Technology (111) Gandhilagai

Email: vmishra@iitgn.ac.in

Dr. Charu Singh, Scientist-SE

Marine and Atmospheric Sciences Department

Indian Institute of Remote Sensing (IIRS-ISRO), Dehradun

Email: charu@iirs.gov.in

Dr. Rajneesh Bhutani, Professor & Head

Department of Earth Sciences

Pondicherry University, Puducherry, India

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