

**Pratiman Patel** | PhD  
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#### ACADEMIC DETAILS

Examination	University	Year	CPI/%
Doctor of Philosophy	Indian Institute of Technology, Bombay, India	2021 (Feb)	-
Master of Technology: <i>Remote Sensing &amp; GIS (Water Resources)</i>	Indian Institute of Remote Sensing, Dehradun, India	2015	8.00/10.0
Bachelor of Technology: <i>Agricultural Engineering</i>	College of Agricultural Engineering, Jabalpur, India	2013	8.10/10.0

#### TECHNICAL SKILLS

- **Languages:** Python, R, NCL
- **Models:** Weather Research & Forecasting (WRF) Model, HEC-HMS, HEC-RAS, MIKE11
- **Softwares:** ArcGIS, QGIS, ERDAS, ENVI
- **Extra:** High Performance Computing, Bash, L<sup>A</sup>T<sub>E</sub>X, MS Office

#### FELLOWSHIP

- Overseas Visiting Doctoral Fellow (OVDF) at Purdue University, USA (2019-2020)

#### RESEARCH PROJECTS

- **Urban Climate Modeling using uSINGV** (Postdoctoral Fellow, National University of Singapore)  
(Supervisor: Prof. Matthias Roth , December'21 - Present)
- **Rainfall Forecasting through Regional Weather Modelling: A Precursor to Near Real-Time Urban Flood Forecasting** (Ph.D. Research Project)  
(Supervisor: Prof. Subhankar Karmakar , Co-Supervisor: Prof. Subimal Ghosh, July'15 - February'21)
- **Flood Simulation using Weather Forecasting and Hydrological Models** (M.Tech Research Project)  
(Supervisor: Dr. Praveen K. Thakur, Co-Supervisor: Dr. S.P. Aggarwal, July'14 - July'15)
- **Selection of potential sites for water harvesting structure in Jabalpur district using Remote Sensing & GIS** (B.Tech Major Project)  
(Supervisor: Dr. Bhaskar R. Nikam, Co-Supervisor: Dr. S.P. Aggarwal, January'13 - May'13)
- **Land use/ Land Cover change detection of Jabalpur block using Remote Sensing and GIS technique** (B.Tech Major Project)  
(Supervisor: Dr. S.K. Sharma, July'12 - December'12)

#### PUBLICATIONS

- **Patel, P.,** Karmakar, S., Ghosh, S., Aliaga, D., and Niyogi, D. (2021). Impact of green roofs on heavy rainfall In tropical, coastal urban area. *Environmental Research Letters*.
- **Patel, P.,** Karmakar, S., Ghosh, S., and Niyogi, D. (2020). Improved Simulation of Very Heavy Rainfall Events by Incorporating WUDAPT Urban Land Use/ Land Cover in WRF. *Urban Climate*, 32, p.100616
- **Patel, P.,** Ghosh, S., Kagainalkar, A., Islam, S., and Karmakar, S. (2019). Performance evaluation of WRF for extreme flood forecasts in a coastal urban environment. *Atmospheric Research* , 223, 39-48.

#### PROFESSIONAL MEMBERSHIPS

- ◦ American Geophysical Union ◦ IEEE Geoscience and Remote Sensing Society ◦ European Geosciences Union ◦ Associate Member of Institution of Engineers (A.M.I.E.)

#### REFERENCES

- Prof. Subhankar Karmakar, CESE, IIT Bombay, Powai, Mumbai-400076, India. E-mail : skarmakar@iitb.ac.in
- Prof. Subimal Ghosh, Civil Engineering, IIT Bombay, Powai, Mumbai-400076, India. E-mail : subimal@civil.iitb.ac.in
- Prof. Dev Niyogi, Professor, Department of Geological Sciences, Jackson School of Geosciences, The University of Texas at Austin, Austin, Texas, USA. E-mail : dev.niyogi@jsg.utexas.edu