Puneet Sharma

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EDUCATION

Ph.D., (July 2014-present) Atmospheric Science

Centre for Atmospheric Sciences, Indian Institute of Technology Delhi, New Delhi, India

• CGPA: 8.0/10

• <u>Thesis Title</u>: Aerosol-Cloud interaction over the South Asian monsoon region: Implications for the regional climate.

· Supervisor: Dr. Dilip Ganguly

M.Sc., (2012) Physics

Jamia Millia Islamia, Delhi, India

• CGPA: 7.2/10

B.Sc., (2009) Instrumentation, Physics, Mathematics

Jamia Millia Islamia, Delhi, India

• Percentage: 63.72

AWARDS AND FELLOWSHIPS

- Ph.D. Fellowship: Qualified Graduate Aptitude Test for Engineering (GATE) organized by Ministry of Human resource development (MHRD), Government of India
 - All India Rank 722 in Physics 2013.
 - All India Rank 769 in Physics 2012.
- Qualified the National Eligibility Test (<u>NET</u>) for lectureship in Physics conducted by Council of Scientific and Industrial Research (CSIR), Government of India, 2014.

PUBLICATIONS

- Charu Singh, Dilip Ganguly, Puneet Sharma 2019. Impact of West Asia, Tibetan Plateau and local dust emissions on intra-seasonal oscillations of the South Asian monsoon rainfall, Climate Dynamics, https://doi.org/10.1007/s00382-019-04944-5 Impact Factor: 4.7
- Charu Singh, Dilip Ganguly, Puneet Sharma, Shiwansha Mishra 2019. Climate response of the south Asian monsoon system to West Asia, Tibetan Plateau and local dust emissions, Climate Dynamics, https://doi.org/10.1007/s00382-019-04925-8 Impact Factor: 4.7

Puneet Sharma, Dilip Ganguly; Assessing aerosols, clouds and their interaction over the northern Bay of Bengal: Role of meteorology in model evaluation and performance. (Manuscript in Preparation)

CONFERENCES/ PRESENTA-TIONS/LECTURES

- ❖ Attended **Spring School on Cloud Physics and Dynamics** at LMD, Ecole Normale Supérieure, Paris, France, 28 May-01 June 2018 with a grade of **A**
- Puneet Sharma and Dilip Ganguly, Aerosol-Cloud interaction over the Bay of Bengal during polluted winter season: A modelling perspective, (Poster) presented at EGU General Assembly-2018, Vienna (Austria), 08-13 April 2018.
- Attended Lecture series on 'Cloud Microphysics and Dynamics: Observations and Models' by Prof. Wojciech W. Grabowski, USA and Dr. Duncun Axisa, USA at Indian Institute of Tropical Meteorology (IITM), Pune, Maharashtra, 29 January-01 February 2018.
- Puneet Sharma and Dilip Ganguly, Evaluating Aerosol and Cloud simulation over South Asia in CESM CAM using satellite observations, (Oral presentation) presented at IASTA-2016, PRL (Ahemadabad, Gujarat), 06-08 December 2016.
- Soumi Dutta, Puneet Sharma and Sagnik Dey, Decadal Changes in Aerosol and Total Cloud Fraction over India, (Poster) presented at IASTA-2014, BHU (Varanasi), 11-13 November 2014.
- ❖ Attended and successfully completed courses on Advanced Statistical methods and Remote Sensing & GIS during Ph.D. coursework.

COMPUTATIONAL SKILLS

Community Earth System Model

- Porting CESM1, CESM CAM-Chem, SPCAM to PADUM (Hybrid High Performance Computing (HHPC) http://supercomputing.iitd.ac.in) facility at IIT Delhi
- Conducted benchmarking exercises and experiments.

Programming Languages: Python, R, FORTRAN, MATLAB

Software Packages: CDAT, Numpy, Scipy, Matplotlib, Statsmodels, ArcGIS, LATEX

WORK EXPERIENCE

- Senior Software Engineer (AI & Machine Learning) at Nable IT Consultancy Services Pvt. Ltd. (February 2020 - July 2020):
 - Successfully developed python and R based software for data ingestion and statistical analysis for the purpose of Market Mix Modelling.
 - For the same software, implemented sampling based multi-variate regression models for Ordinary Least squares and Bayesian framework.
 - Created technical content and documentation for the software.
- Junior Research Fellow (JRF) (July 2013 June 2014): Simulation and Prediction of Intense Convective Systems Associated with Indian Summer Monsoon: Role of Land Surface Processes. Principal Investigator: Dr. Sagnik Dey, Centre for Atmospheric Sciences, Indian Institute of Technology Delhi, New Delhi, India:

Performed statistical analysis of aerosol and precipitation time series datasets from satellite observations to understand the impact of anthropogenic aerosols on Indian Summer Monsoon (ISM).

CERTIFICATIONS Coursera - Machine Learning

https://www.coursera.org/account/accomplishments/certificate/42YPNPLNPBGL