Hamid Ali Syed

Curriculum Vitae

Education

2026	**Ph.D. in Atmospheric Sciences**, *Purdue University*, West Lafayette, IN, USA (expected)
2021	**M.Tech. Atmospheric Sciences**, *Savitribai Phule Pune University*, Pune, MH, India
2018	**B.E. Mechanical**, *University of Kashmir*, Srinagar, J&K, India

Research experience

Ph.D. Topic

Title	Tornadoes in Quasilinear Convective Systems
Supervisor	Dr. Daniel Dawson
Funding	NOAA PERiLS Project

M. Tech Thesis

Title	Characterization of hourly derived radar-based quantitative precipitation estimation of extreme rainfall events
Employer	Indian Institute of Tropical Meteorology (IITM)
Supervisor	Dr. M.C.R. Kalapureddy

Skills

Software Development	PyScanCf - The library for handling IMD radar data ([Link to Library](#))
Programming	Python, IPyParallel, Dask Parallel, Parallel netCDF, MATLAB, FORTRAN 90/95
Frequently Using	PyScanCf, Py-ART, Xarray, Wradlib, Scipy, Pandas, Sklearn, PyTorch, Tensorflow, Geopandas, Metpy, etc.
Visualization and Statistics	Ferret, Climate Data Operators (CDO), Origin
Super-computing	Purdue's Bell Cluster, IITM's HPC Pratyush and HPC Aditya

Experience with

Radar	Volume Scan Datasets (vol, Cf-Radial), Disdrometer, Raingauge, MRR

Satellite Observations	TRMM, GPM (L2, L3, IMERG), INSAT3D, SRTM
Reanalysis & Model datasets	MRMS, NCAR Reanalysis, ERA5, ERSST-V5, ERA40, ERA-INTERIM, WRF, GPCP, IMDAA

Publications

Peer Reviewed

1. in-prep

Non-Peer Reviewed

1. Syed, Hamid Ali. (2023). Critical Need for Doppler Weather Radars in India: Predicting and Mitigating the Impact of Severe..., *Medium*, LINK.
2. Syed, Hamid Ali, Sayyed, Imran, Kalapureddy, Madhu Chandra R, & Grandhi, Kishore Kumar. (2021) PyScanCf – The library for single sweep datasets of IMD weather radars, *Zenodo*, DOI: 10.5281/zenodo.5574160

Oral Presentations

1. 2021 INTROMET: Radar-based quantitative precipitation estimation
2. 2020 Seventh WMO International Workshop on Monsoons (IWM-7): PyScanCf Introduction

Poster Presentations

1. Dawson, Daniel T., Qin Jiang, Jacob Andrew Bruss, Matthew Graber, Funing Li, Hamid Ali Syed, Faith Vendl, Quinn Wilson, Michael I. Biggerstaff, and Sean M. Waugh (2022): Overview of Purdue's Mobile Disdrometer Operations in PERiLS 2022. In: 30th Conference on Severe Local Storms, Birmingham, AL, 22-26 November 2022. AMS, pp. 1-6.
2. 2021 Seventh WMO International Workshop on Monsoons (IWM-7): LINK to PyScanCf Poster
3. 2021 ICCP 2021 & 10th International Cloud Modeling Workshop: LINK to Poster, IITM Pune
4. 2021 Radar-Based Quantitative Precipitation Estimation in Western Ghats, Midwest Student Conference on Atmospheric Research: LINK to Poster, University of Illinois

Courses/Certifications

Nov 2020	Machine Learning by Stanford University, Coursera
Oct 2020	Understanding and Visualizing Data with Python, Coursera
Sep 2020	Data Analysis with Python, IBM, Coursera
Sep 2020	Python for Data Science, IBM, Coursera
Sep 2020	Python for Everybody by University of Michigan, Coursera
Jul 2017	Course on Computer Concepts, NIELIT
May 2011	Course in C/C++, DOEACC

Workshops & Seminars

Dec 2020	Basics of Satellite Meteorology at Space Application Center, ISRO Online
Feb 2020	From the Byte to Service: Trans-disciplinary Climate Research, IITM

Jan 2020	National Information System for Climate and Environment Studies and its Activities, NRSC ISRO & IITM Pune, IITM
Apr 2020	Seminar on Clouds in Cyclones, SPPU
Nov 2019	Seminar on Photosphere, SPPU
Oct 2019	Seminar on Cyber Security, SPPU
July 2017	Seminar on Autonomous Vehicles, KU

Awards

2014-2017 & 2019-2021	Merit cum means scholarship – Ministry of Minority Affairs, Govt of India

Volunteering

Feb 2020	Volunteered in Annual Monsoon Workshop hosted by Indian Meteorological Society, Pune Chapter, Pune
Since 2014	Regular Career counseling in rural and remote areas of Kashmir Valley

Language Skills

Proficient	Kashmiri, English, Urdu
Intermediate	Arabic (reading and writing)
Basic	Hindi (speaking)