

## AI in Weather Radars

Sunday, 23 January 2022

### Short Course Organizers:

Haonan Chen and V. Chandrasekar  
Colorado State University, Fort Collins, CO

### Short Course Agenda

Time	Topic	Instructor/Contact
8:45AM	Check in	AMS
9:00AM	Opening, introduction and course overview	Chandra, Chen
9:05AM	Introduction to modern weather radar	Chandra
9:40AM	Introduction to machine learning and artificial intelligence	Chen
10:30AM	Coffee break	
10:45AM	Machine learning in weather radar applications: Data processing, precipitation classification, quantitative precipitation estimation (QPE), and nowcasting	Chandra, Chen
12:00PM	Lunch on own	
1:00AM	Review of software/dataset for class	Chen
1:15PM	Hands-on Exercises: Precipitation classification, estimation, and nowcasting	Chen
3:30	Summary, additional resources and homework assignment	Chandra, Chen
3:45PM	Course end	Chandra, Chen

### DATA ACCESS

The students will be provided with data sets from weather radars that are openly available. Detailed information will be available at the data access session. Hands-on machine learning with Python will be instructed using cloud servers.