

AI in Weather Radars

Sunday, 23 January 2022

Short Course Organizers:

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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.