Unsupervised Reasoning & NLP

AVIATION DATA SCIENCE

USRA Instructors:

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Duration: 12 weeks
Date: March 8, 2022– May 24, 2022 (Tuesdays)
Time: 10am-12pm
Location: Microsoft Teams
Registration:
https://forms.gle/1t1baGC2mLsvisxY9

Pre-Requisites:

Linear Algebra
Python Programming
Intro to Aviation Data Science
Deep Learning with Keras

Short Syllabus:

This course teaches introductory and advanced methods in unsupervised learning and reasoning as well as natural language processing (NLP) and its application to the aviation domain. The participants will learn to reason through a vast amount of unlabeled and unstructured data and process it for down-stream tasks such as representation learning, clustering, and anomaly/outlier detection.

The course will be taught in two phases: (i) lecture and discussion on the topic of interest, and (ii) lab, with implementation of the methods learned on the real-world data using Python in JupyterLab.

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