

INTRODUCTION TO MACHINE LEARNING

Unsupervised Learning Algorithms

WORKSHOP DETAILS

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Course Materials: Github Link - https://github.com/Tanya-Khanna/DataScienceWorkshop_2024_NBL

WORKSHOPS SCHEDULE

Introduction to Python Programming	February 1, 2024; 4 – 5:30 PM
Mastering Data Analysis: Pandas & Numpy	February 8, 2024; 4 – 5:30 PM
Python for Visualization & Exploration	February 15, 2024; 4 – 5:30 PM
Mathematical Foundations of Data Science	February 29, 2024; 4 – 5:30 PM
Introduction to Machine Learning: Supervised	March 7, 2024; 4 – 5:30 PM
Introduction to Machine Learning: Unsupervised	March 21, 2024; 4 – 5:30 PM
Introduction to Deep Learning	March 28, 2024; 4 – 5:30 PM
Deep Dive into Natural Language Processing	April 4, 2024; 4 – 5:30 PM
Large Language Models and Chat GPT	April 11, 2024; 4 – 5:30 PM

<https://libcal.rutgers.edu/calendar/nblworkshops?cid=4537&t=d&d=0000-00-00&cal=4537&inc=0>

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1. *Fundamentals of Unsupervised Learning*
2. *Types of Unsupervised Learning: Clustering, Dimensionality Reduction & Association Rule Mining*
3. *Practical End-to-End example combining KMeans Clustering & PCA*
4. *DBSCAN Clustering: Theory*
5. *Market Basket Analysis: Practical Example*