

Overview

Session Topic	Key Concepts of Data Science & Artificial Intelligence
Timing	<p>June 21 – 25 Online Sessions Daily from 12:00 to 15:00 ALMT (UTC+6) (3 50-minute sessions per day)</p> <ul style="list-style-type: none"> • KSU: 09.00 – 12.00 (UTC+3) • UAEU: 10.00 – 13.00 (UTC+4) • IITB, UoC: 11.30 – 14.30 (UTC+5.5) • NU: 12.00 – 15.00 (UTC+6) • UY: 12.30 – 15.30 (UTC+6.5) • CU, UI: 13.00 – 16.00 (UTC+7) • HKUST, NUS, PKU, THU, UM: 14.00 – 17.00 (UTC+8) • SNU, UTokyo: 15.00 – 18.00 (UTC+9)
Participants	Undergraduate students of Computer Science, Computer Engineering, or Data Science, having completed the 2 nd year of bachelor degree study
Pre-requisites	Math (Calculus, Probability, Linear Algebra) and Programming in Python

Draft Program

	Day 1	Day 2	Day 3	Day 4	Day 5
12:00	Program Overview & Introduction to Data Science	Multi-modal Biometric Authentication	An Introduction to Deep Learning	Imaging Technologies for AI (RGB, depth, thermal, and neuromorphic cameras)	Recurrent Neural Networks and Introduction to Automatic Speech Recognition
1:00	Sensor Networks & Multimedia Data	Brain-Machine Interfaces	Anomaly Detection in Medical Images	Tutorial: Face Detection and Facial Landmark Extraction from Thermal Images	Data-based Modeling of COVID-19 & Epidemic Simulation Exercise
2:00	Raw Sensor Data – Overview & Extraction Exercise	Human-Computer Interaction – Recognition of Sign Language	Human Activity Recognition	Tutorial: Vehicle Detection Using Transfer Learning from Synthetic Data	Closing Remarks