



Theme

Learning Objectives

1	Development of AI from the early stages to present day technologies	Design a program to identify the position of human parts and also make the computer to track the identified human parts.
2	Deep Learning techniques in Sound Classification	Tinker with an AI system which is able to recognize different animal sounds and program the system to detect poaching.
3	Machine Learning: In depth analysis & types of ML	Create a Machine Learning Model that recognizes letters from the English alphabet by testing and training it.
4	Exploring Facial Recognition technology	Explore various algorithms used in recognizing faces by developing a program that will classify facial features such as eyes, nose, ears etc.
5	Posenet	Design an AI system that can analyse different human positions and react to different human poses.
6	Learn, Build and Test - How is AI able to recognize different names & commands?	Develop and train an AI system using regular expressions to understand the differences between past & present scenarios.
7	Sensory units in Artificial Intelligence	Explore the role of Sense Perception by developing an app to sense environmental parameters and program the app to make inquiries if any abnormalities in the environment are sensed.
8	AI Databases: Explore the strategies used in working of a AI Database	Develop an app that will analyse video data and suggest similar products/things related to the content of the video data.
9	How Conversational Agents understand us	Explore the working of Alexa, Siri and other conversational agents, and interpret how they grasp user intent. Create an AI Voice User Interface (VUI) program that will perform voice-driven basic arithmetic operations and calculations.
10 11	AI in Game Development	Develop a real time game with an AI which will evolve throughout the game play. This AI will eventually learn to play the game without being programmed explicitly.
12	AI and Data	Discuss the ethical problems and Dangers of Data Acquisition in Artificial Intelligence.
13 14	Capstone Projects	Design your own projects using the PBL {Project Based Learning Framework} that applies AI to solve a problem. Instructors will guide the students using the Design Thinking philosophy.