3   The Subset of AI

LEARNING OUTCOMES
At the end of the chapter, students will be able to:
◗ Identify the subset of AI
◗ Summarize about Data Science
◗ Summarize about Natural Language Processing (NLP)
◗ Summarize about Computer Vision
◗ Differentiate between the subsets in a nutshell

CHAPTER NOTES
◗ The three subsets of artificial intelligence are – Data Science, Natural Language Processing and Computer Vision.
◗ Data science, a crucial subset of AI, involves the extraction of meaningful insights from large and complex datasets.
◗ Natural Language Processing (NLP) and Computer Vision are two specialized domains within AI
◗ NLP empowers machines to comprehend, generate, and interact with human language in ways that were once only achievable by humans
◗ Computer vision equips machines with the ability to process and interpret visual data from the world around us.
◗ Data science is used for market analysis, predictive modelling for disease outbreaks, demand forecasting, campaign effectiveness, quality control, route optimization, crime analysis, personalized learning, pollution monitoring etc.
◗ NLP is used in brand monitoring, transcription services, content creation, language localization, creating concise summaries, GPT models etc.
◗ Computer vision is used in disease diagnosis, inventory management, self-driving cars, special effects in movies, crop monitoring, facial recognition, environment perception, augmented reality, defect detection etc.