Data science is an interdisciplinary field that extracts meaningful insights from structured and unstructured data using statistics, programming, and machine learning. It involves collecting, cleaning, analyzing, and visualizing data to solve complex problems across industries like healthcare, finance, and marketing. Key tools include Python, R, SQL, and frameworks like TensorFlow and PyTorch. Data scientists use techniques such as regression, clustering, and deep learning to predict trends and optimize decisions. With the rise of big data and AI, data science plays a crucial role in driving innovation, automating processes, and improving business strategies. It combines domain expertise, technical skills, and analytical thinking to turn raw data into actionable intelligence.