

High-level lesson plan for an introductory session on deep learning:

- Introduction to Neural Networks: Explain the basic concept of artificial neural networks, including neurons, activation functions, and weights.
- Deep Learning vs. Traditional Machine Learning: Discuss the key differences between deep learning and traditional machine learning algorithms.
- Deep Learning Architectures: Introduce popular deep learning architectures like feedforward neural networks, convolutional neural networks (CNNs), and recurrent neural networks (RNNs).
- Training Deep Learning Models: Explain the process of training deep learning models using backpropagation and gradient descent.
- Deep Learning Applications: Discuss real-world applications of deep learning, such as image recognition, natural language processing, and autonomous vehicles.
- Hands-on Exercise: Provide a coding exercise using a deep learning framework like TensorFlow or PyTorch to build a simple neural network for a classification task.
- Q&A and Wrap-up: Allow time for questions and summarize the key takeaways from the session.