Session 3 - PyTorch Fundamentals and Sim Networks

Session 3: PyTorch Fundame Simple Neural Network

- Introduction to PyTorch and Tensors: Understanding tensors, tensor operations, and PyTo
- AutoGrad and Computational Graphs: Mechanism of automatic differentiation in PyTorch.
- Building Simple Neural Networks: Constructing basic neural networks using PyTorch.
- Implementing Training Loops: Writing loops for training and validating models.
- Introduction to Gemini: How to integrate 3rd party LLMs into your apps.

PART 1

Please refer to this <u>COLAB</u> (https://colab.research.google.com/drive/14GfJuQxrls552KMH6_\) notes), and this <u>COLAB</u> (https://colab.research.google.com/drive/1oqlXKiU_m9nAqgo4v5fer notes) for the stuff that we discussed today.

PART 2

Now, let's do some hands on and integrate Gemini into our

Assignment

- 1. Your Assignment is to repeat assignment 2, but this time add Gemini to it. If you had alread new application.
- 2. You need to host it on EC2.
- 3. Submission:

- 1. YouTube Video of your App working
- 2. Github Code for your App
- 3. EC2 URL (keep it active till 1 hour after your submission)
- 4. LinkedIn/X/etc link if shared with the world
- 4. Have fun!

VIDEOS

STUDIO (<u>transcript (https://canvas.instructure.com/courses/12597696/files/3</u> (https://canvas.instructure.com/courses/12597696/files/310012297/download



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