Fine Tuning

Gradient.ai

$env:GRADIENT\_WORKSPACE\_ID='a4680e35-3c00-49b6-b932-c576c0c8ea8f\_workspace'

$env:GRADIENT\_ACCESS\_TOKEN='DAImo2rEQlTt5HgikdtTMQajXjoj5izC'

Google Colab Code:

Setup an Environment

!pip install gradientai --upgrade

import os

os.environ['GRADIENT\_WORKSPACE\_ID']='a4680e35-3c00-49b6-b932-c576c0c8ea8f\_workspace'

os.environ['GRADIENT\_ACCESS\_TOKEN']='DAImo2rEQlTt5HgikdtTMQajXjoj5izC'

Fine tuning code:

from gradientai import Gradient

def main():

    gradient = Gradient()

    base\_model = gradient.get\_base\_model(base\_model\_slug="nous-hermes2")

    new\_model\_adapter = base\_model.create\_model\_adapter(

        name="Kamranmodel"

    )

    print(f"Created model adapter with id {new\_model\_adapter.id}")

    #new\_model\_adapter.fine\_tune(samples=[{"inputs": "princess, dragon, castle"}])

    sample\_query = "### Instruction: Who is Kamran? \n\n ### Response:"

    print(f"Asking: {sample\_query}")

    ## Before Finetuning

    completion = new\_model\_adapter.complete(query=sample\_query, max\_generated\_token\_count=100).generated\_output

    print(f"Generated(before fine tuning): {completion}")

    samples=[

        {"inputs":"### Instruction: Who is Kamran? \n\n### Response: Kamran is popular mentor and youtuber"},

        {"inputs":"### Instruction: Who is this person named Kamran? \n\n### Response: Kamran is SAP BI Solution Architect"},

        {"inputs":"### Instruction: Who do you know about Kamran? \n\n### Response: Kamran is a Data Scientist and have expertise in SAP BI"},

        {"inputs":"### Instruction: Can you tell me about Kamran? \n\n### Response: Kamran has exterpertise in Data and Analytics and AI"}

    ]

    ## Lets define parameters for finetuning

    num\_epochs = 3

    count=0

    while count < num\_epochs:

      print(f"Fine tuning the model with iteration {count + 1}")

      new\_model\_adapter.fine\_tune(samples=samples)

      count=count+1

    #after fine tuning

    completion = new\_model\_adapter.complete(query=sample\_query, max\_generated\_token\_count=100).generated\_output

    print(f"Generated (After Fine Tuning): {completion}")

    new\_model\_adapter.delete()

    gradient.close()

if \_\_name\_\_ == "\_\_main\_\_":

    main()