

BT5151 – Advanced Analytics and Machine Learning**Assignment -1**

Name: Kamat Shlok Sudhir

Student ID: A0295802Y

Name of AI tool Used	Prompts Used	Output or Response	How was this used in the assignment
ChatGPT	Provide a detailed PyTorch training loop for an image segmentation model	Generated a structured PyTorch training loop for image segmentation	Improved upon the base PyTorch documentation, enhancing clarity and efficiency.
ChatGPT	Convert this PyTorch code into PyTorch Lightning while keeping the model structure unchanged	Rewrote functions using PyTorch Lightning syntax, improving modularity and readability	Simplified model training workflow, saving time and effort compared to referencing documentation alone.
ChatGPT	Explain the differences between PyTorch and PyTorch Lightning in terms of scalability and ease of use	Provided a comparative analysis highlighting automation in PyTorch Lightning	Helped justify the transition to PyTorch Lightning in the assignment.