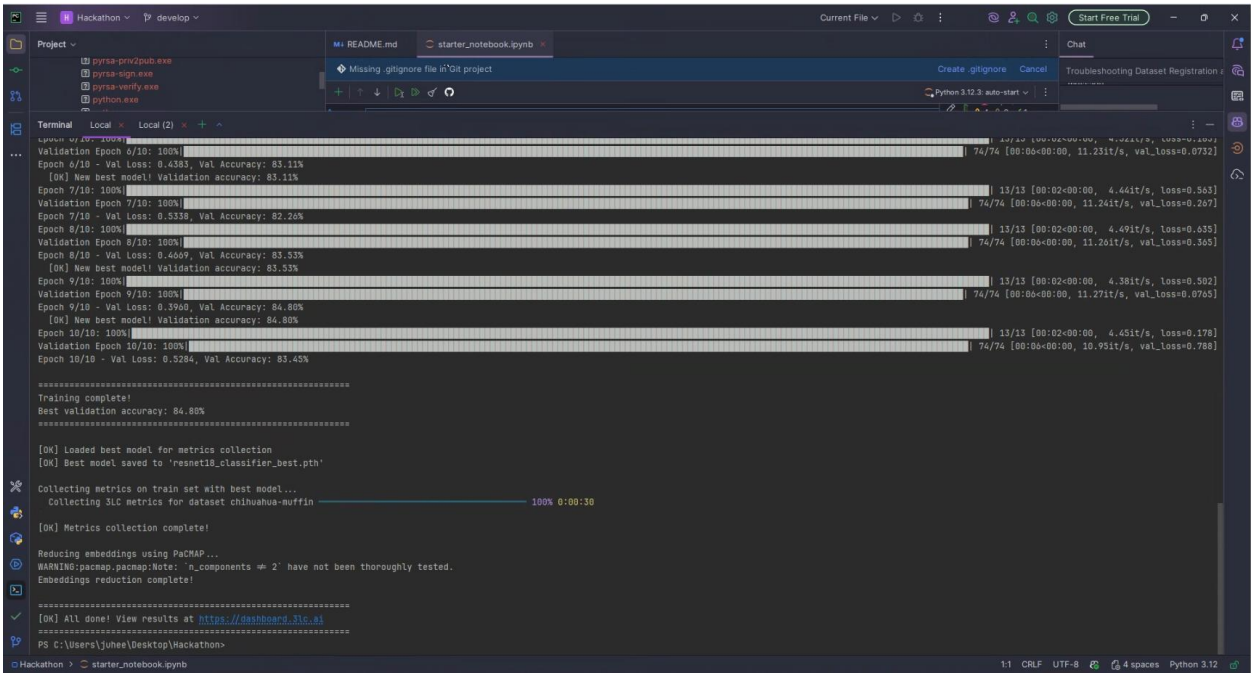
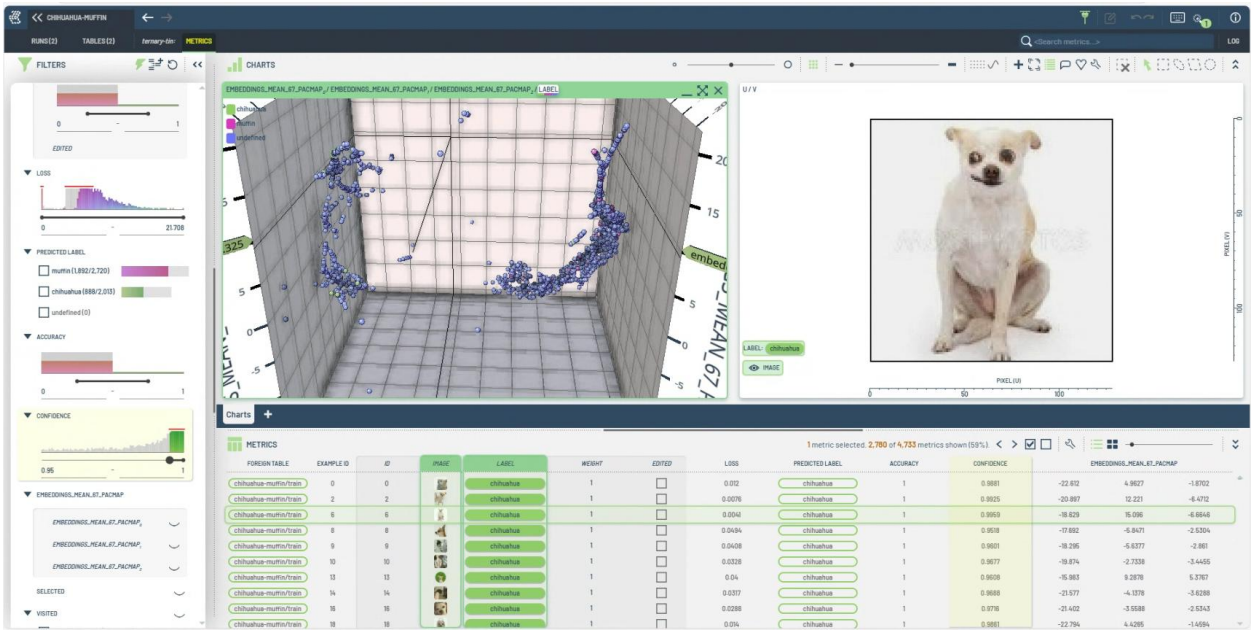
SCREENSHOTS:

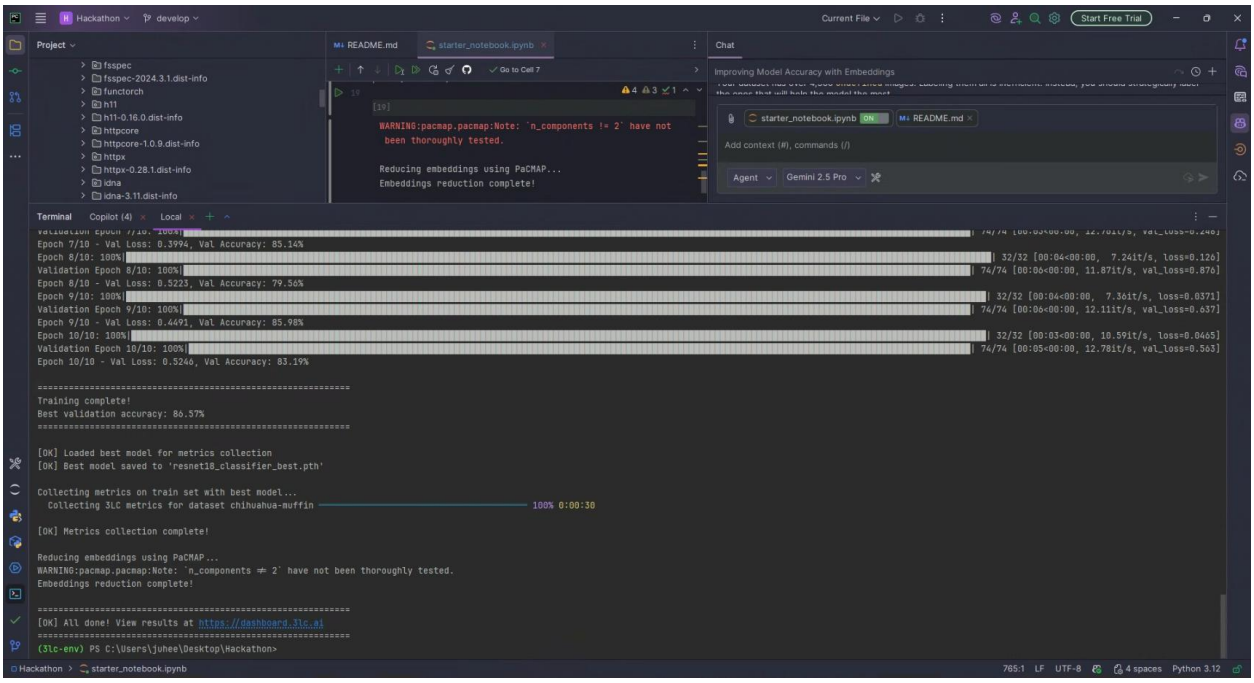
Initial Accuracy:



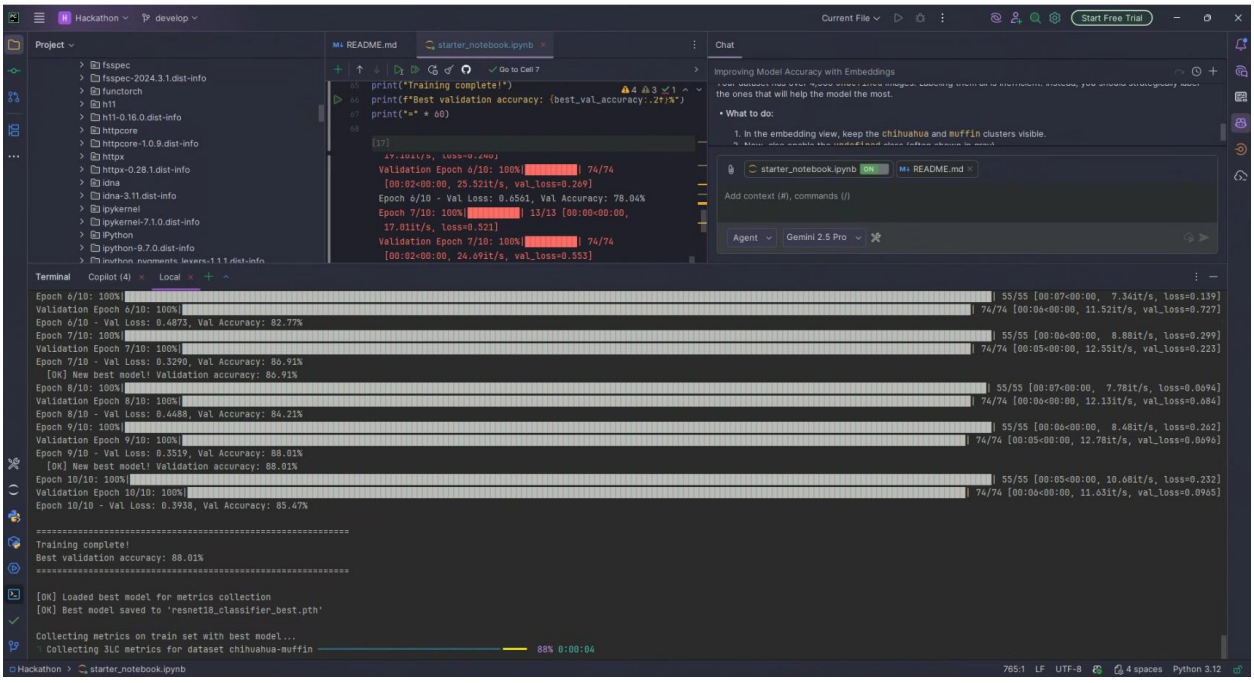
Version 1 - Confidence level above 0.95



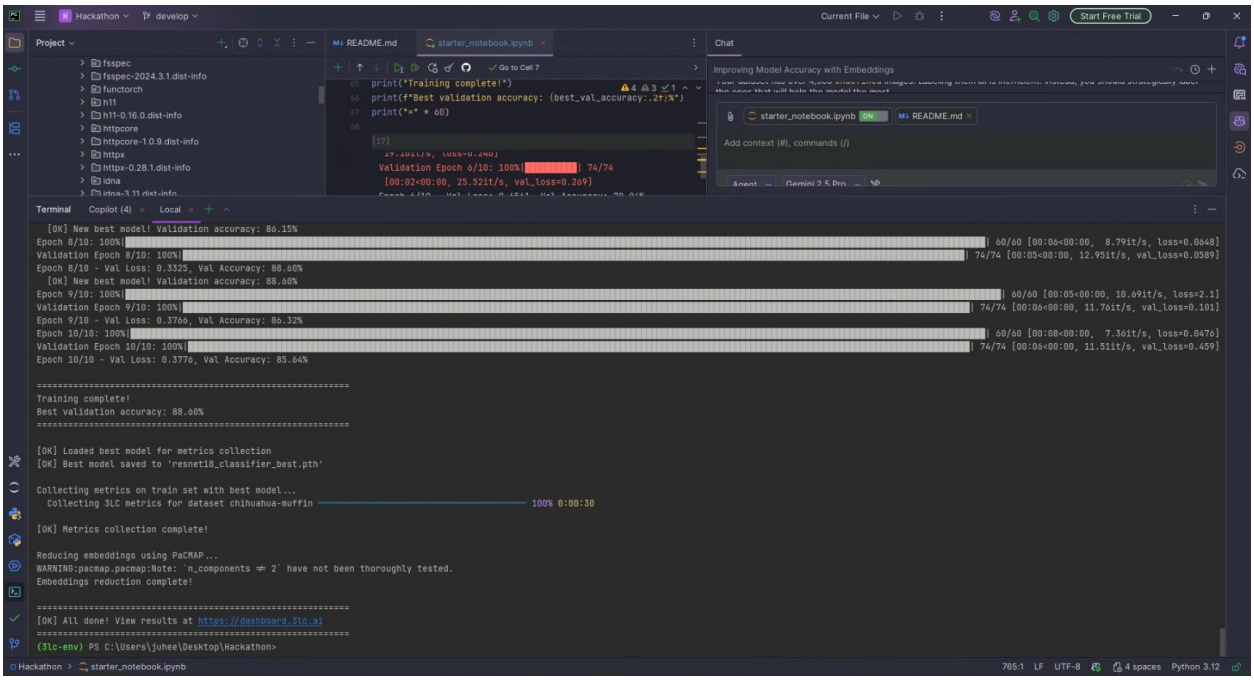
Version 2 - Greater loss 21.708



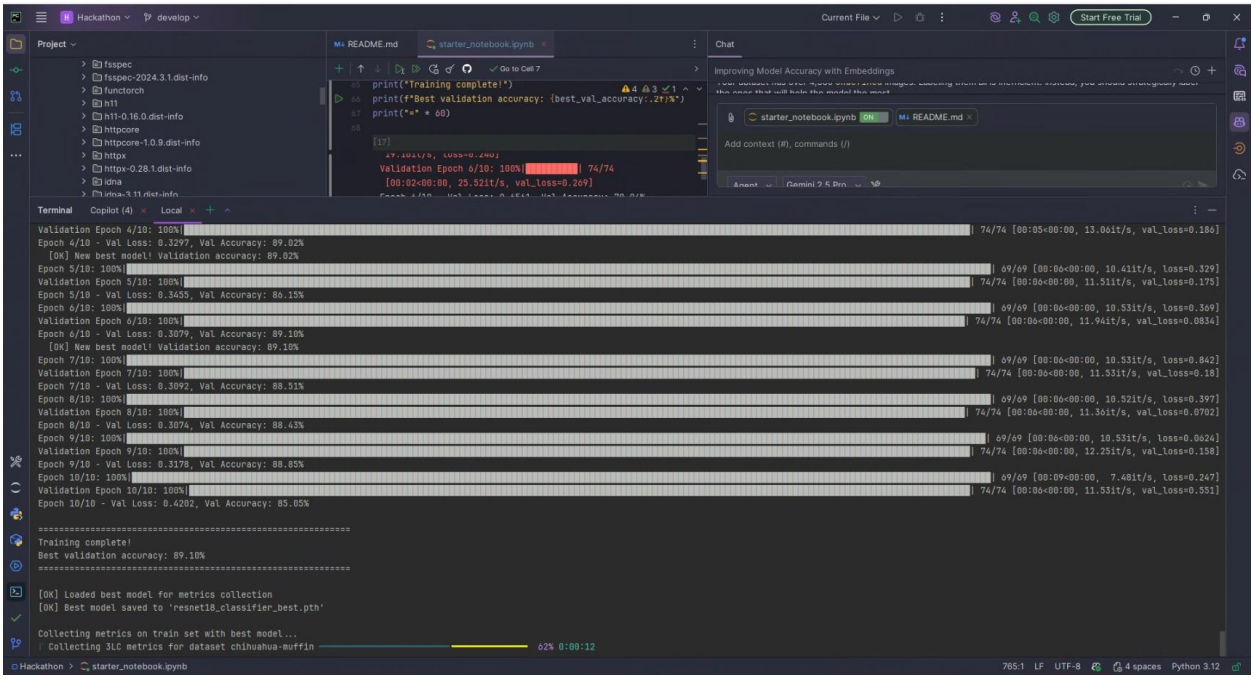
Version 3 - labelled muffin and chihuahua using ID with confidence more than .94



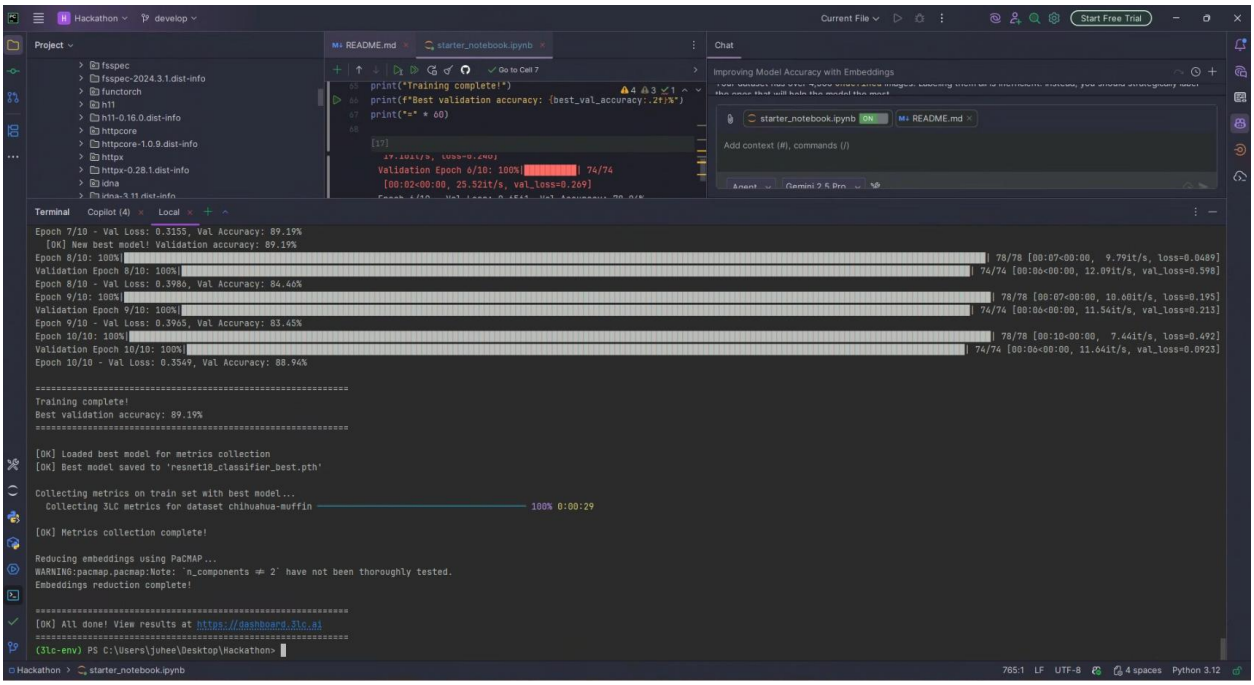
Version 4 - labelled muffin with confidence more than .94



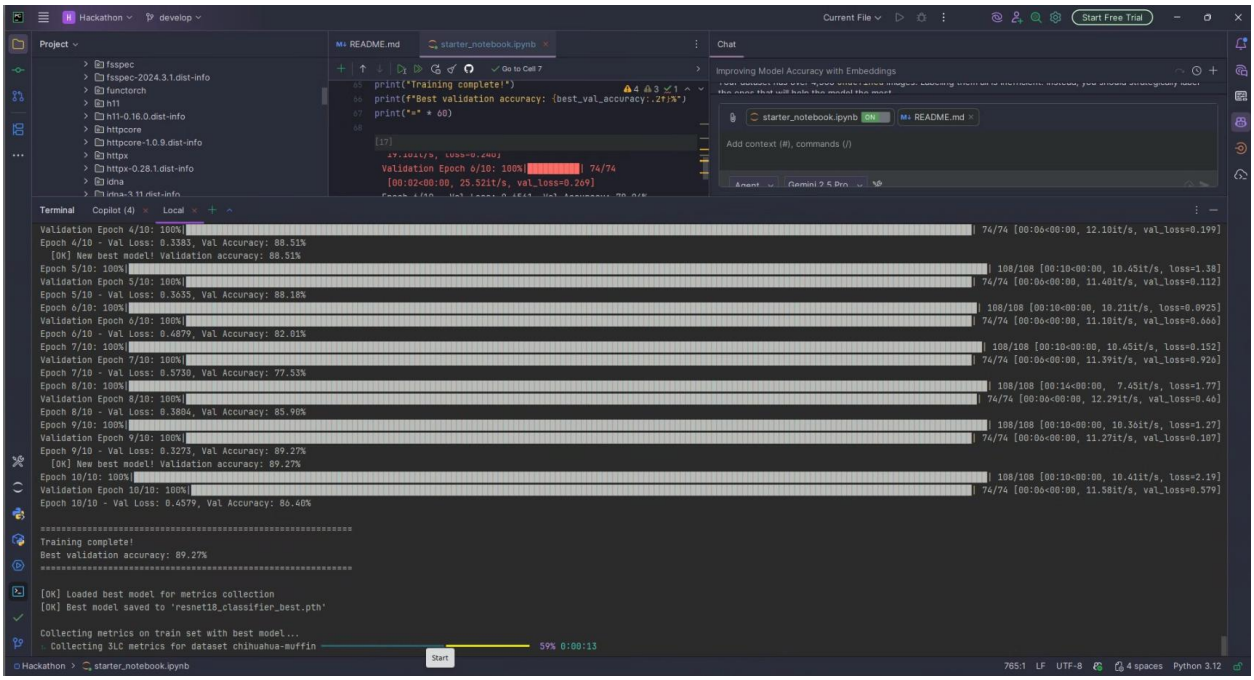
Version 5 - CL > 0.95, predicted label - chihuahua, dropping those into labels, same for muffins, and outliers labeled as undefined.



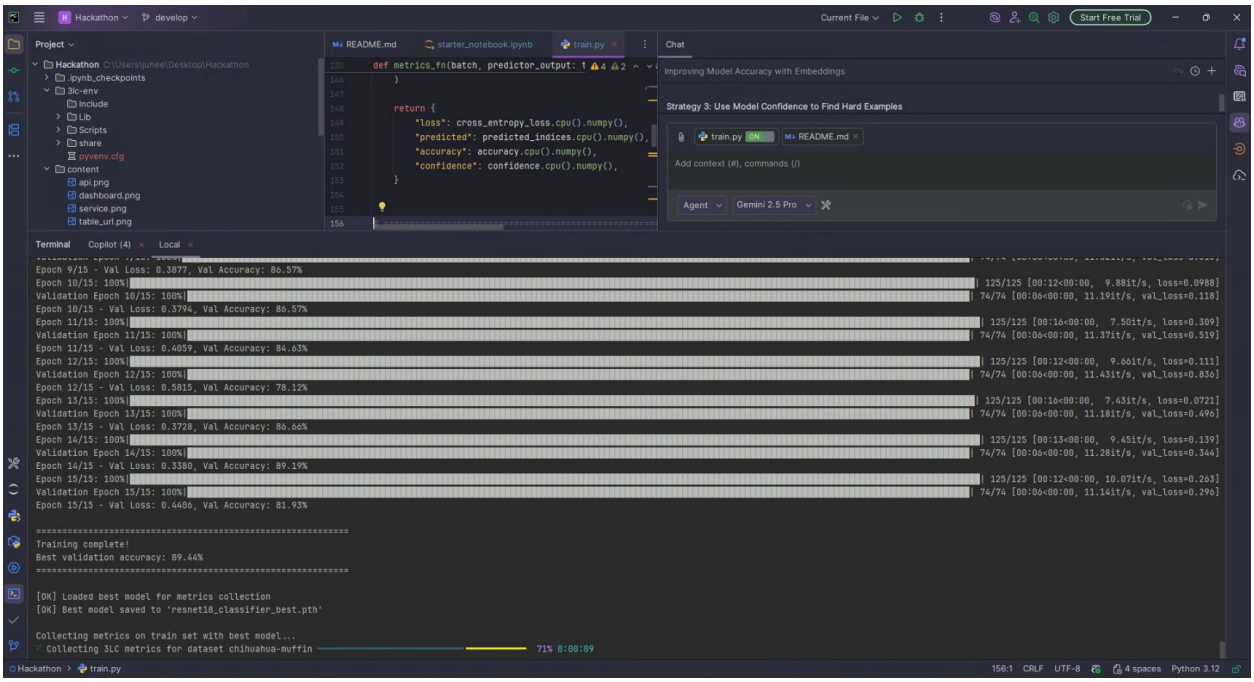
Version 6 - CL > 0.95, predicted label - chihuahua, dropping those into labels, same for muffins, and outliers labeled as undefined.



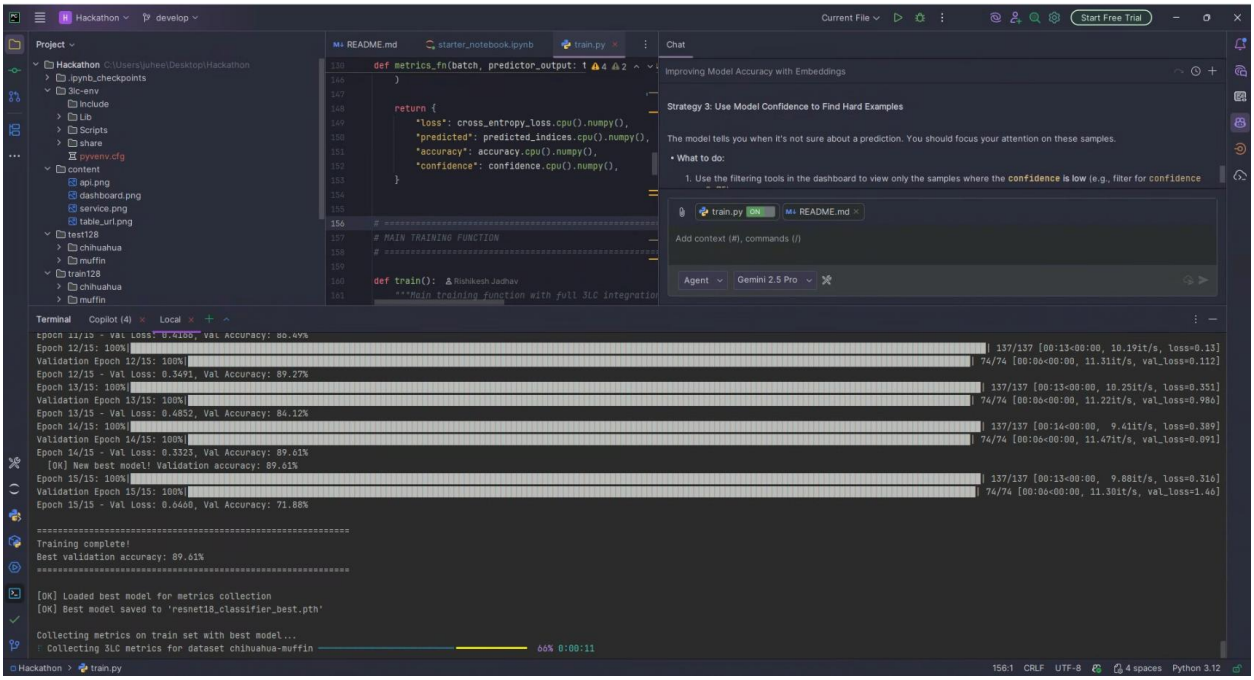
Version 7: CL > 0.95, predicted label - chihuahua, dropping those into labels, and outliers labeled as undefined.

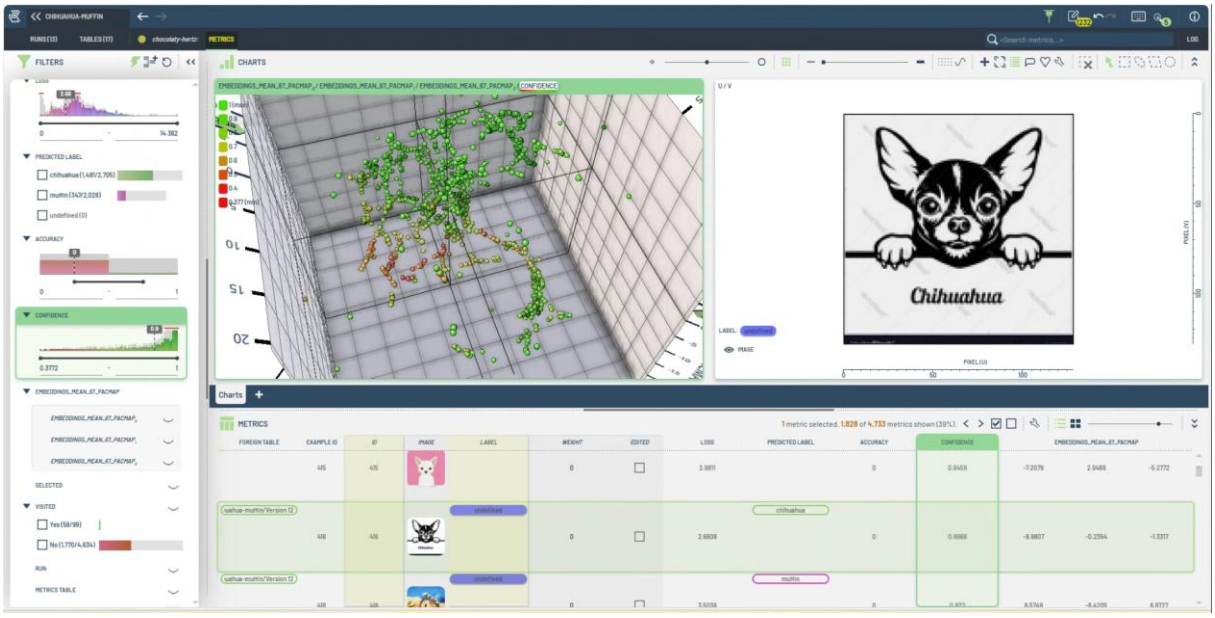


Version 8: CL > 0.99, labeled - undefined selected, predicted label - Muffin, dragging those into labels, and done same for Chihuahua, and outliers labeled as undefined.

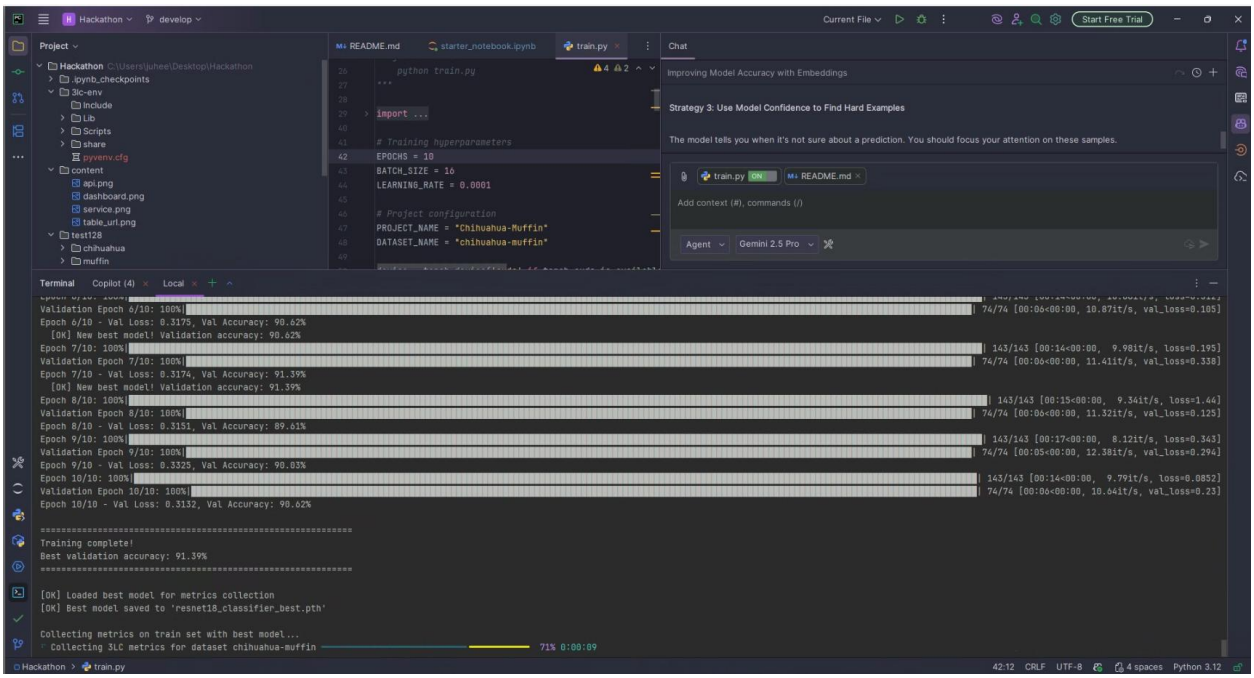


Version 9: CL > 0.99, labeled - undefined selected, predicted label - chihuahua, dragging those into labels, and done same for muffins, and outliers labeled as undefined.

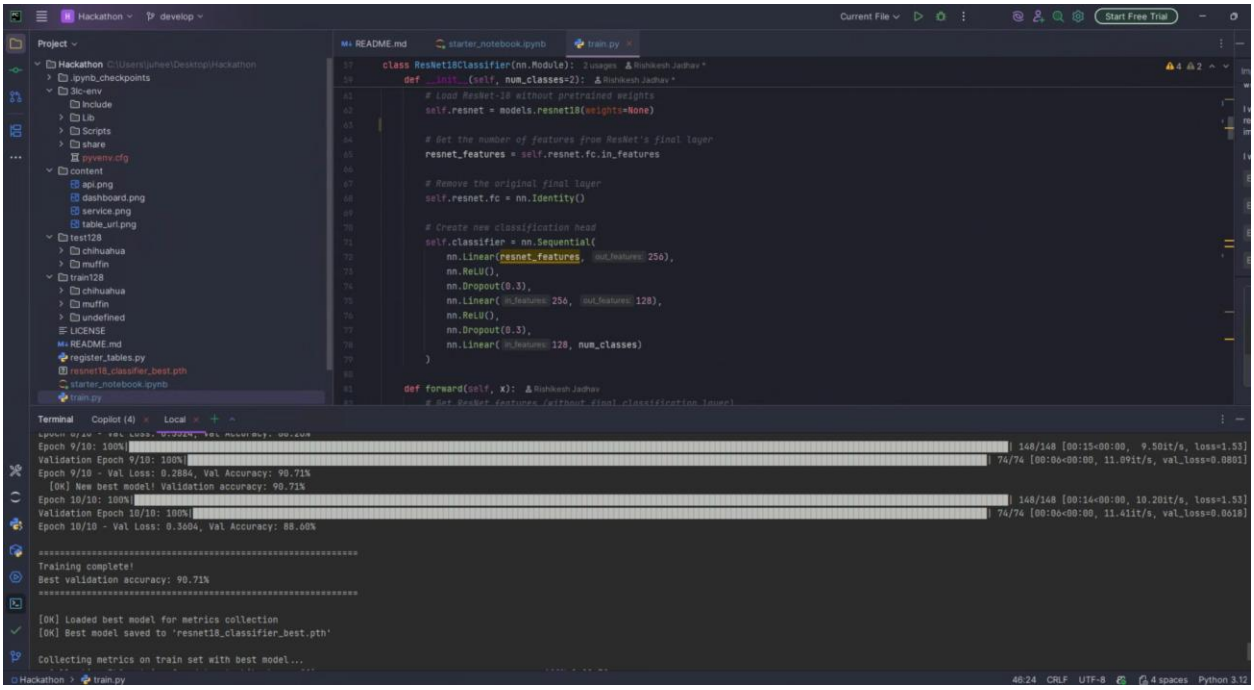




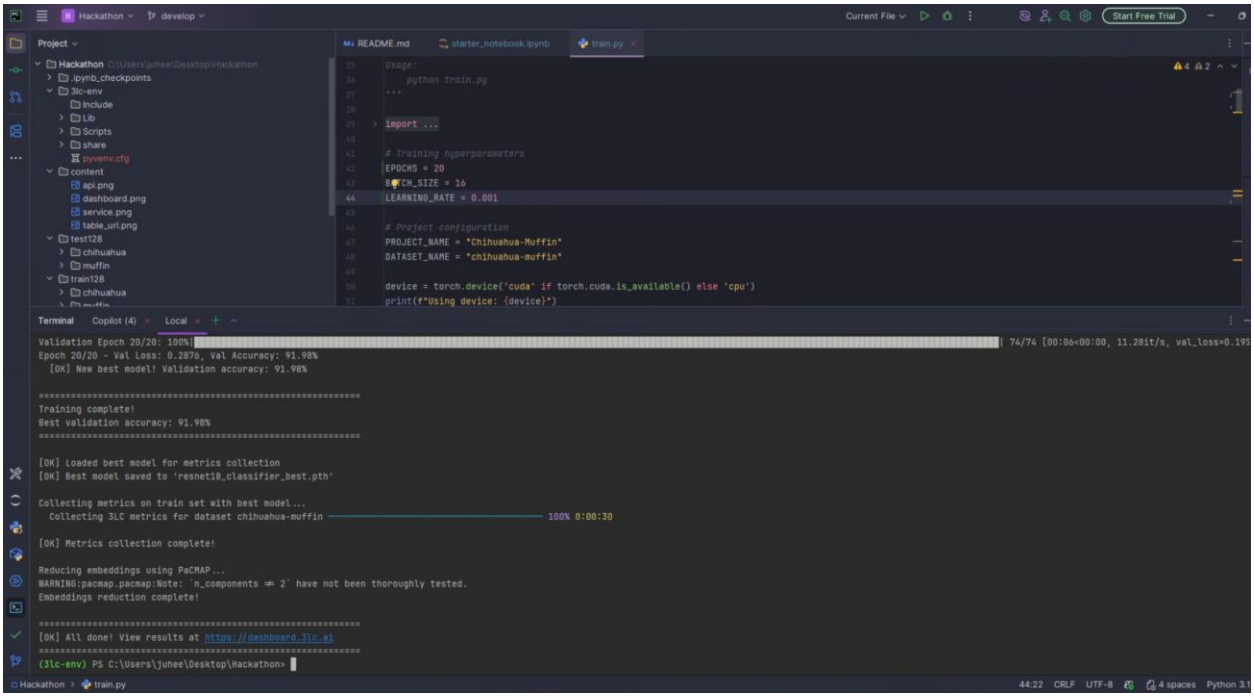
Version 10: Pulled confidence column up to the chart's label (title), make the blob coloured on the basis of their confidence instead of the label. Selected CL < 0.68, predicted label - chihuahua, separated label by using filter ID, dragging the predicted label into labels, for muffins, labeled them by selecting all, and outliers labeled as undefined.
predicted label - Muffin, did same for this.



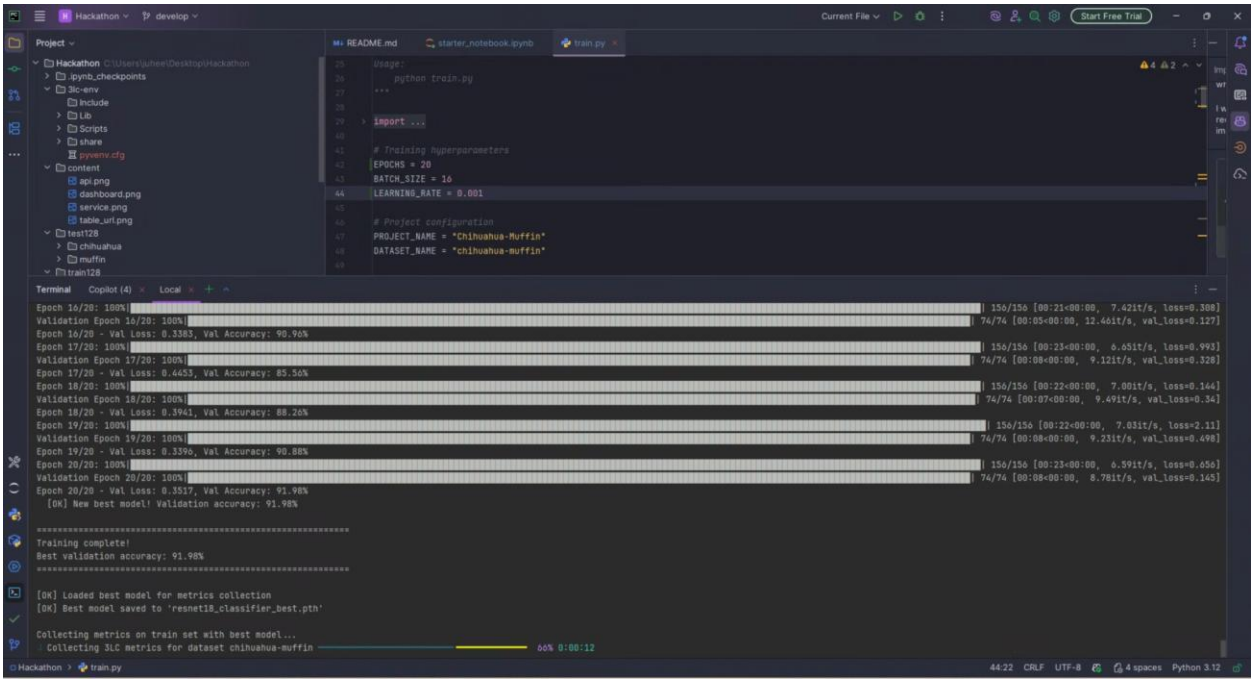
Version 11: Pulled confidence column up to the chart's label (title), make the blob coloured on the basis of their confidence instead of the label. Selected CL < 0.70, predicted label - chihuahua, separated label by using filter ID, dragging the predicted label into labels, for muffins, labeled them by selecting all, and outliers labeled as undefined.
predicted label - Muffin, did same for this.

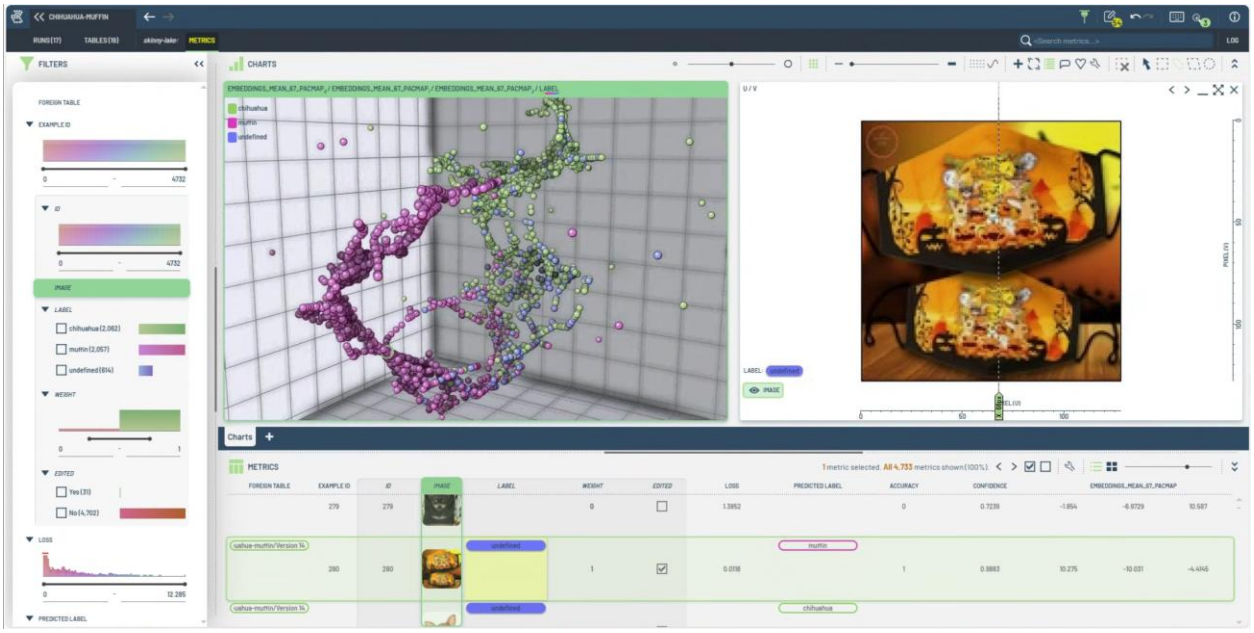


EPOCHS = 20 and LEARNING_RATE = 0.001

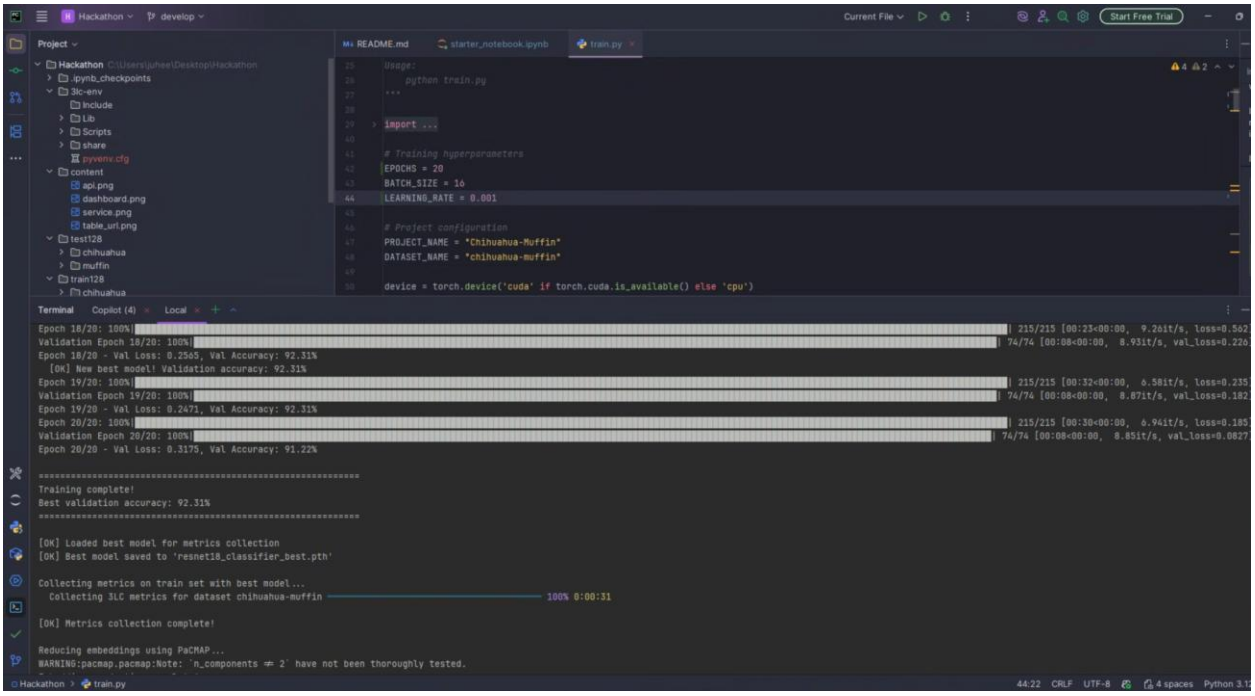


Version 12: Pulled confidence column up to the chart's label (title), make the blob coloured on the basis of their confidence instead of the label. cluster selection done on low confidence labels on chart.

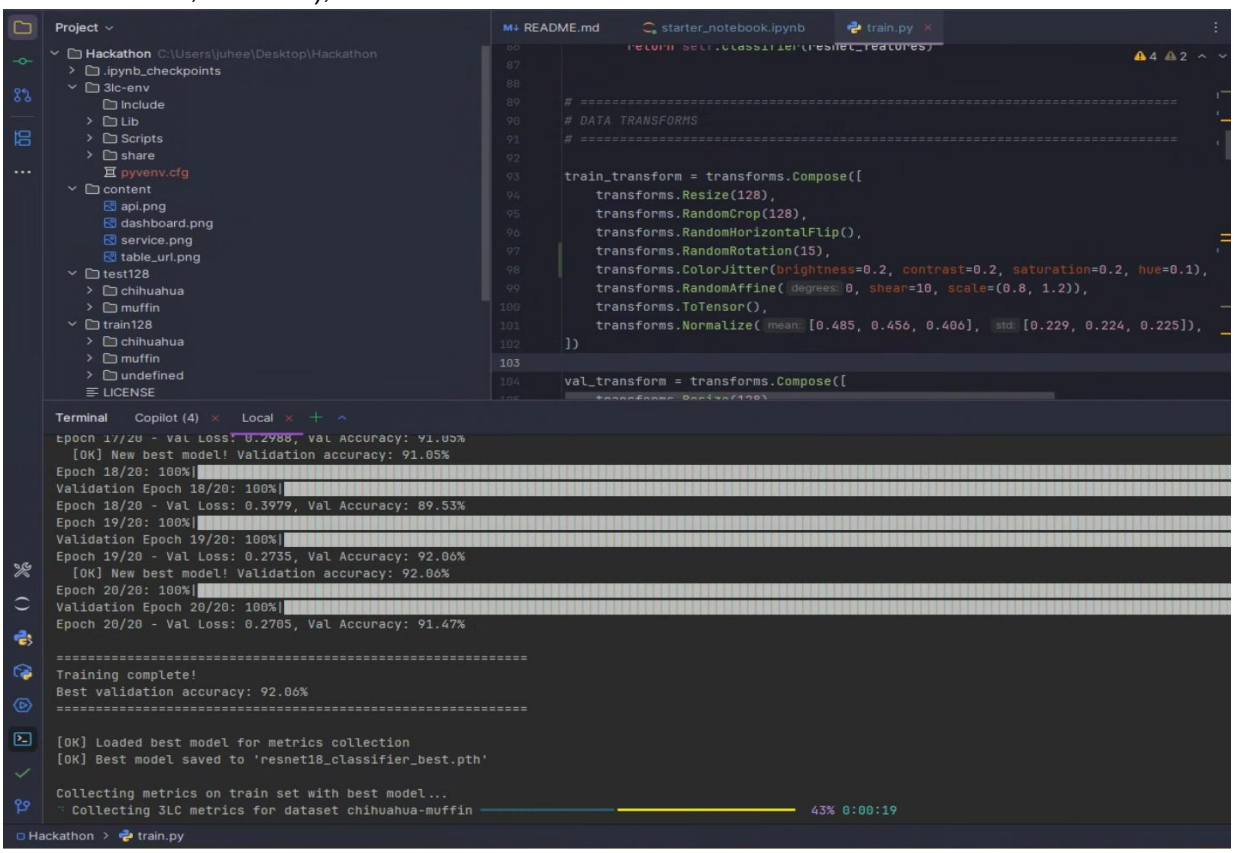




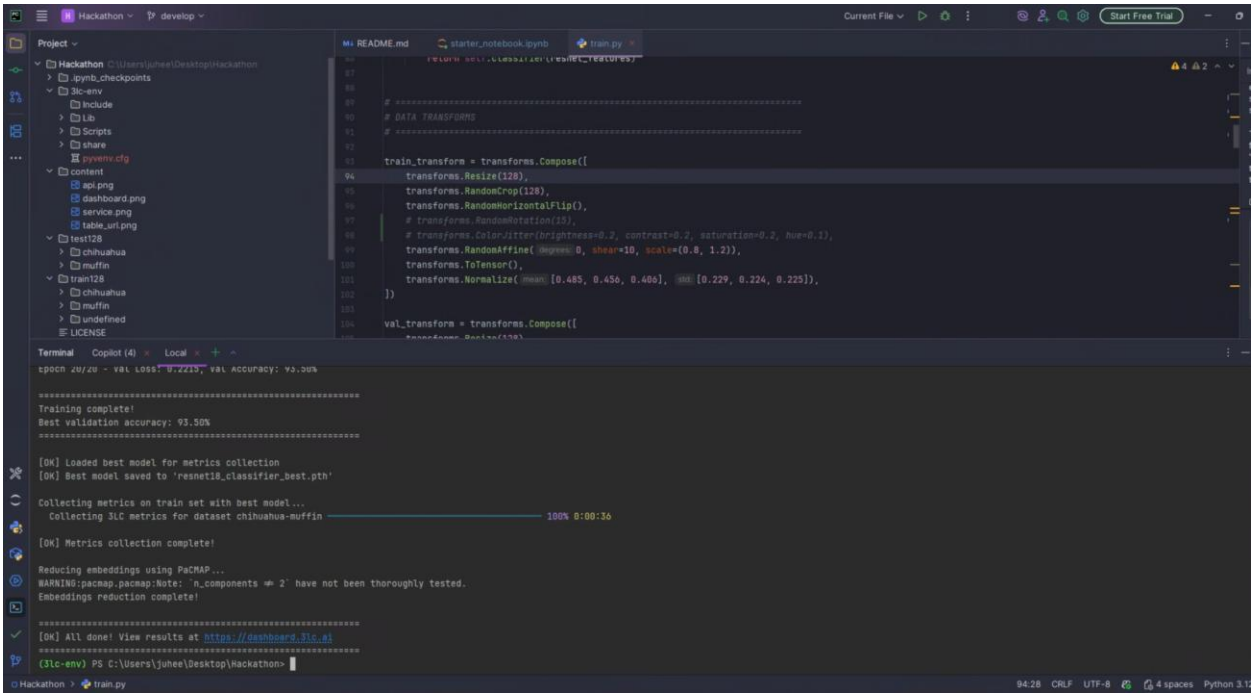
Version 13: undefined selected, predicted - muffin, dragged the predicted label to labels and also checked the mislabelled. Same steps done for predicted - chihuahua, also considering confidence level



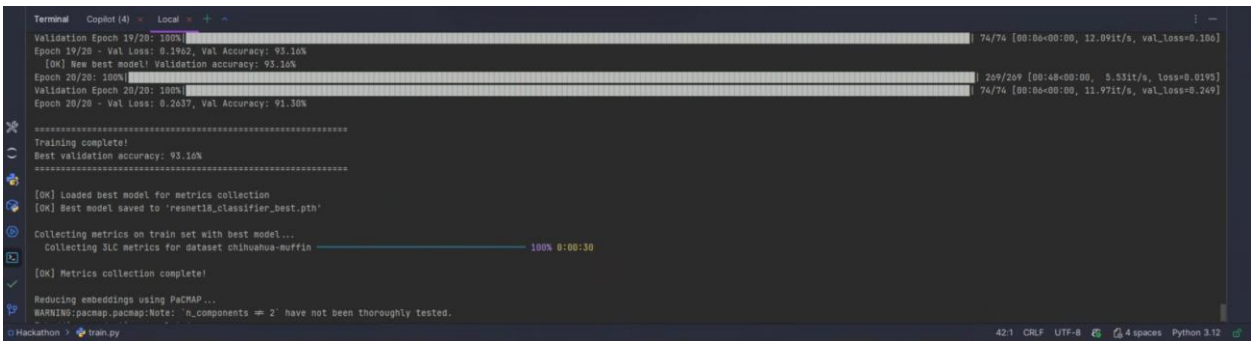
transforms.RandomRotation(15), transforms.ColorJitter(brightness=0.2, contrast=0.2, saturation=0.2, hue=0.1),



Version 14: undefined labels selected - Embedding clusters - similar labelled with predicted status and removed weird/noisy images.



Strong Data Augmentation: RandomResizedCrop, RandomHorizontalFlip, RandomRotation, ColorJitter. This is for preventing overfitting and helping the model generalize.
Dynamic Learning Rate: ReduceLROnPlateau scheduler. This will help the model train more effectively.



Version 15: Effective labelling through clustering and correcting the mislabelled with epochs = 50