

Starting PBT ViT Experiment with Timing...
Note: This will train ViT-Small models on CIFAR-10
Each member may have different batch sizes

Google Drive already mounted.
Using device: cuda
Google Drive already mounted.
/tmp/ipython-input-123503625.py:51: FutureWarning: `torch.cuda.amp.GradScaler(args...)` is deprecated. Please use `torch
scaler = torch.cuda.amp.GradScaler(enabled=torch.cuda.is_available())`
Starting PBT Training for ViT-Small...
Population size: 5
Total epochs: 70
Exploit interval: 5 epochs
Checkpoints will be saved to: /content/drive/MyDrive/Colab_Checkpoints

=====
Epoch 1/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 2.2935681343078613 seconds
/tmp/ipython-input-1221649430.py:694: FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch
with torch.cuda.amp.autocast(enabled=torch.cuda.is_available()):`
LR changed during epoch: 1.93e-07 -> 3.81e-05
total runtime to train this model was 25.314712285995483 seconds
Hyperparameteres for model 0 at epoch 1
lr: 0.0001894099367645819

weight_decay: 0.09616745871263249

drop_path: 0.30758866767960447

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5740673542022705 seconds
Loss: 2.0683
Train Accuracy: 22.81%
Test Accuracy: 29.53%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5498230457305908 seconds
LR changed during epoch: 2.66e-07 -> 5.25e-05
total runtime to train this model was 26.300684213638306 seconds
Hyperparameteres for model 1 at epoch 1
lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.2897326946258545 seconds
Loss: 2.0543

Train Accuracy: 23.22%
Test Accuracy: 26.14%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.548964023590088 seconds
LR changed during epoch: 4.75e-07 -> 9.36e-05
total runtime to train this model was 27.383543968200684 seconds
Hyperparameteres for model 2 at epoch 1
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4563074111938477 seconds
Loss: 2.0167
Train Accuracy: 24.34%
Test Accuracy: 30.18%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6228647232055664 seconds
LR changed during epoch: 3.22e-07 -> 6.34e-05
total runtime to train this model was 25.881751775741577 seconds
Hyperparameteres for model 3 at epoch 1
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.9708127975463867 seconds
Loss: 2.0266
Train Accuracy: 24.14%
Test Accuracy: 29.98%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.7734265327453613 seconds
LR changed during epoch: 3.64e-07 -> 7.17e-05
total runtime to train this model was 25.64794421195984 seconds
Hyperparameteres for model 4 at epoch 1
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0428407192230225 seconds

Loss: 2.0393

Train Accuracy: 23.55%

Test Accuracy: 29.51%

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Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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Epoch 1 Summary:

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Time: 153.90s (Avg member: 30.78s)

Population Mean Accuracy: 29.07%

Best Member Accuracy: 30.18%

Mean Batch Size: 256

Mean Learning Rate: 3.18e-04

Mean Weight Decay: 0.102

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Epoch 2/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5705244541168213 seconds

LR changed during epoch: 3.81e-05 -> 7.60e-05

total runtime to train this model was 26.766666650772095 seconds

Hyperparameteres for model 0 at epoch 2

lr: 0.0001894099367645819

weight_decay: 0.09616745871263249

drop_path: 0.30758866767960447

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.44909405708313 seconds

Loss: 1.8472

Train Accuracy: 31.35%

Test Accuracy: 34.43%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5839309692382812 seconds

LR changed during epoch: 5.25e-05 -> 1.05e-04

total runtime to train this model was 26.37382459640503 seconds

Hyperparameteres for model 1 at epoch 2

lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.437041759490967 seconds

Loss: 1.8292

Train Accuracy: 32.25%

Test Accuracy: 32.18%

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Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5706331729888916 seconds

LR changed during epoch: 9.36e-05 -> 1.87e-04

total runtime to train this model was 25.84103012084961 seconds

Hyperparameteres for model 2 at epoch 2

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3613996505737305 seconds

Loss: 1.7952

Train Accuracy: 33.19%

Test Accuracy: 35.75%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.760629653930664 seconds

LR changed during epoch: 6.34e-05 -> 1.27e-04

total runtime to train this model was 25.535853385925293 seconds

Hyperparameteres for model 3 at epoch 2

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4433939456939697 seconds

Loss: 1.7981

Train Accuracy: 32.88%

Test Accuracy: 35.17%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6281521320343018 seconds

LR changed during epoch: 7.17e-05 -> 1.43e-04

total runtime to train this model was 26.06596326828003 seconds

Hyperparameteres for model 4 at epoch 2

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.65567684173584 seconds

Loss: 1.8126

Train Accuracy: 32.15%

Test Accuracy: 36.23%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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Epoch 2 Summary:

=====

Time: 153.38s (Avg member: 30.68s)

Population Mean Accuracy: 34.75%

Best Member Accuracy: 36.23%

Mean Batch Size: 256

Mean Learning Rate: 3.18e-04

Mean Weight Decay: 0.102

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Epoch 3/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5839903354644775 seconds

LR changed during epoch: 7.60e-05 -> 1.14e-04

total runtime to train this model was 26.32605290412903 seconds

Hyperparameteres for model 0 at epoch 3

lr: 0.0001894099367645819

weight_decay: 0.09616745871263249

drop_path: 0.30758866767960447

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4010651111602783 seconds

Loss: 1.7401

Train Accuracy: 35.58%

Test Accuracy: 35.49%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5706837177276611 seconds

LR changed during epoch: 1.05e-04 -> 1.57e-04

total runtime to train this model was 25.554012298583984 seconds

Hyperparameteres for model 1 at epoch 3

lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.364820957183838 seconds

Loss: 1.7270

Train Accuracy: 36.05%

Test Accuracy: 35.81%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5751235485076904 seconds

LR changed during epoch: 1.87e-04 -> 2.80e-04

total runtime to train this model was 25.713244438171387 seconds

Hyperparameteres for model 2 at epoch 3

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3627631664276123 seconds

Loss: 1.6702

Train Accuracy: 37.95%

Test Accuracy: 42.23%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.600104570388794 seconds

LR changed during epoch: 1.27e-04 -> 1.90e-04

total runtime to train this model was 25.51693081855774 seconds

Hyperparameteres for model 3 at epoch 3

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.6058685779571533 seconds

Loss: 1.6972

Train Accuracy: 37.09%

Test Accuracy: 39.51%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.768209457397461 seconds
LR changed during epoch: 1.43e-04 -> 2.14e-04
total runtime to train this model was 24.757716178894043 seconds
Hyperparameteres for model 4 at epoch 3
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567
drop_path: 0.25432892395471046
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4290072917938232 seconds
Loss: 1.6988
Train Accuracy: 36.84%
Test Accuracy: 38.93%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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Epoch 3 Summary:
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Time: 150.49s (Avg member: 30.10s)
Population Mean Accuracy: 38.39%
Best Member Accuracy: 42.23%
Mean Batch Size: 256
Mean Learning Rate: 3.18e-04
Mean Weight Decay: 0.102

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Epoch 4/70
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--- Training Member 0 (Batch size: 256) ---
built data in 1.5862984657287598 seconds
LR changed during epoch: 1.14e-04 -> 1.52e-04
total runtime to train this model was 25.92886209487915 seconds
Hyperparameteres for model 0 at epoch 4
lr: 0.0001894099367645819

weight_decay: 0.09616745871263249
drop_path: 0.30758866767960447
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4508540630340576 seconds
Loss: 1.6501
Train Accuracy: 39.31%
Test Accuracy: 41.30%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.576326608657837 seconds
LR changed during epoch: 1.57e-04 -> 2.09e-04

total runtime to train this model was 25.772047758102417 seconds

Hyperparameteres for model 1 at epoch 4

lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.279414415359497 seconds

Loss: 1.6319

Train Accuracy: 39.76%

Test Accuracy: 43.28%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5664761066436768 seconds

LR changed during epoch: 2.80e-04 -> 3.73e-04

total runtime to train this model was 26.153206825256348 seconds

Hyperparameteres for model 2 at epoch 4

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.371246337890625 seconds

Loss: 1.5466

Train Accuracy: 43.37%

Test Accuracy: 45.19%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5837628841400146 seconds

LR changed during epoch: 1.90e-04 -> 2.53e-04

total runtime to train this model was 25.735888719558716 seconds

Hyperparameteres for model 3 at epoch 4

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.293567180633545 seconds

Loss: 1.5914

Train Accuracy: 41.40%

Test Accuracy: 43.69%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.649017333984375 seconds
LR changed during epoch: 2.14e-04 -> 2.86e-04
total runtime to train this model was 25.274913787841797 seconds
Hyperparameteres for model 4 at epoch 4
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.807792901992798 seconds
Loss: 1.5841
Train Accuracy: 41.66%
Test Accuracy: 44.91%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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Epoch 4 Summary:

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Time: 150.37s (Avg member: 30.07s)
Population Mean Accuracy: 43.67%
Best Member Accuracy: 45.19%
Mean Batch Size: 256
Mean Learning Rate: 3.18e-04
Mean Weight Decay: 0.102

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Epoch 5/70

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--- Training Member 0 (Batch size: 256) ---
built data in 1.7248005867004395 seconds
LR changed during epoch: 1.52e-04 -> 1.89e-04
total runtime to train this model was 24.810357332229614 seconds
Hyperparameteres for model 0 at epoch 5
lr: 0.0001894099367645819

weight_decay: 0.09616745871263249

drop_path: 0.30758866767960447

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3232779502868652 seconds
Loss: 1.5665
Train Accuracy: 42.87%
Test Accuracy: 44.20%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5778443813323975 seconds

LR changed during epoch: 2.09e-04 -> 2.61e-04

total runtime to train this model was 26.361002922058105 seconds

Hyperparameteres for model 1 at epoch 5

lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3648581504821777 seconds

Loss: 1.5388

Train Accuracy: 43.46%

Test Accuracy: 46.82%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.581061840057373 seconds

LR changed during epoch: 3.73e-04 -> 4.66e-04

total runtime to train this model was 25.919581651687622 seconds

Hyperparameteres for model 2 at epoch 5

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.2932217121124268 seconds

Loss: 1.4784

Train Accuracy: 46.33%

Test Accuracy: 49.81%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.561232566833496 seconds

LR changed during epoch: 2.53e-04 -> 3.16e-04

total runtime to train this model was 25.876557111740112 seconds

Hyperparameteres for model 3 at epoch 5

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3106987476348877 seconds

Loss: 1.5023
Train Accuracy: 45.11%
Test Accuracy: 48.56%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5805518627166748 seconds
LR changed during epoch: 2.86e-04 -> 3.57e-04
total runtime to train this model was 25.84894847869873 seconds
Hyperparameteres for model 4 at epoch 5
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3715014457702637 seconds

Loss: 1.4905
Train Accuracy: 45.59%
Test Accuracy: 48.17%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 5) ---

==== PBT Exploit & Explore ====

Top performers: [49.81]

Bottom performers: [44.2]

Member 0: lr changed from 0.0001894099367645819 to 0.0002502213586795585
Member 0: weight_decay changed from 0.09616745871263249 to 0.08121118233594017
Member 0: drop_path changed from 0.30758866767960447 to 0.32647451212245726
Member 0 copied from 2

LR=2.50e-04, WD=0.081, DropPath=0.326, Warmup=5 epochs, Batch=256

=====

Epoch 5 Summary:

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Time: 150.92s (Avg member: 30.18s)
Population Mean Accuracy: 47.51%
Best Member Accuracy: 49.81%
Mean Batch Size: 256
Mean Learning Rate: 3.30e-04
Mean Weight Decay: 0.099

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Epoch 6/70

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--- Training Member 0 (Batch size: 256) ---
built data in 1.6670799255371094 seconds
LR changed during epoch: 2.55e-07 -> 5.03e-05
total runtime to train this model was 25.374354600906372 seconds
Hyperparameteres for model 0 at epoch 6

lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.189591884613037 seconds

Loss: 1.3713

Train Accuracy: 50.22%

Test Accuracy: 52.42%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.740116834640503 seconds

LR changed during epoch: 2.61e-04 -> 2.61e-04

total runtime to train this model was 25.740801095962524 seconds

Hyperparameteres for model 1 at epoch 6

lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.08292555809021 seconds

Loss: 1.4624

Train Accuracy: 46.64%

Test Accuracy: 48.77%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6028573513031006 seconds

LR changed during epoch: 4.66e-04 -> 4.66e-04

total runtime to train this model was 26.642027139663696 seconds

Hyperparameteres for model 2 at epoch 6

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4561147689819336 seconds

Loss: 1.4227

Train Accuracy: 48.12%

Test Accuracy: 50.59%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.588956594467163 seconds

LR changed during epoch: 3.16e-04 -> 3.15e-04

total runtime to train this model was 27.263123273849487 seconds

Hyperparameteres for model 3 at epoch 6

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4484312534332275 seconds

Loss: 1.4309

Train Accuracy: 47.90%

Test Accuracy: 51.09%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6028449535369873 seconds

LR changed during epoch: 3.57e-04 -> 3.56e-04

total runtime to train this model was 27.813738584518433 seconds

Hyperparameteres for model 4 at epoch 6

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.0778608322143555 seconds

Loss: 1.4337

Train Accuracy: 47.82%

Test Accuracy: 50.22%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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Epoch 6 Summary:

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Time: 156.62s (Avg member: 31.32s)

Population Mean Accuracy: 50.62%

Best Member Accuracy: 52.42%

Mean Batch Size: 256

Mean Learning Rate: 3.30e-04

Mean Weight Decay: 0.099

=====

Epoch 7/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.7383673191070557 seconds
LR changed during epoch: 5.03e-05 -> 1.00e-04
total runtime to train this model was 26.372308254241943 seconds
Hyperparameteres for model 0 at epoch 7
lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.793653964996338 seconds
Loss: 1.3211
Train Accuracy: 51.99%
Test Accuracy: 52.85%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5712203979492188 seconds
LR changed during epoch: 2.61e-04 -> 2.60e-04
total runtime to train this model was 26.63956904411316 seconds
Hyperparameteres for model 1 at epoch 7
lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3445191383361816 seconds
Loss: 1.3959
Train Accuracy: 49.30%
Test Accuracy: 49.73%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5945844650268555 seconds
LR changed during epoch: 4.66e-04 -> 4.65e-04
total runtime to train this model was 26.767690420150757 seconds
Hyperparameteres for model 2 at epoch 7
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3404295444488525 seconds

Loss: 1.3654

Train Accuracy: 50.50%

Test Accuracy: 53.31%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5565226078033447 seconds

LR changed during epoch: 3.15e-04 -> 3.15e-04

total runtime to train this model was 26.171535968780518 seconds

Hyperparameteres for model 3 at epoch 7

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.26910400390625 seconds

Loss: 1.3763

Train Accuracy: 49.99%

Test Accuracy: 51.57%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.696810245513916 seconds

LR changed during epoch: 3.56e-04 -> 3.56e-04

total runtime to train this model was 26.481226444244385 seconds

Hyperparameteres for model 4 at epoch 7

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.6900713443756104 seconds

Loss: 1.3626

Train Accuracy: 50.51%

Test Accuracy: 52.43%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 7 Summary:

=====

Time: 155.33s (Avg member: 31.07s)

Population Mean Accuracy: 51.98%

Best Member Accuracy: 53.31%

Mean Batch Size: 256

Mean Learning Rate: 3.30e-04

Mean Weight Decay: 0.099

```
=====
Epoch 8/70
=====
```

--- Training Member 0 (Batch size: 256) ---

built data in 1.5808074474334717 seconds

LR changed during epoch: 1.00e-04 -> 1.50e-04

total runtime to train this model was 26.565902709960938 seconds

Hyperparameteres for model 0 at epoch 8

lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.325099229812622 seconds

Loss: 1.3020

Train Accuracy: 52.88%

Test Accuracy: 53.14%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5711326599121094 seconds

LR changed during epoch: 2.60e-04 -> 2.60e-04

total runtime to train this model was 26.40691304206848 seconds

Hyperparameteres for model 1 at epoch 8

lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.323960781097412 seconds

Loss: 1.3545

Train Accuracy: 50.77%

Test Accuracy: 52.77%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5740532875061035 seconds

LR changed during epoch: 4.65e-04 -> 4.63e-04

total runtime to train this model was 26.25688147544861 seconds

Hyperparameteres for model 2 at epoch 8

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3467721939086914 seconds

Loss: 1.3131

Train Accuracy: 52.33%

Test Accuracy: 54.11%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5832030773162842 seconds

LR changed during epoch: 3.15e-04 -> 3.14e-04

total runtime to train this model was 26.53217101097107 seconds

Hyperparameteres for model 3 at epoch 8

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5614819526672363 seconds

Loss: 1.3263

Train Accuracy: 52.13%

Test Accuracy: 54.35%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.7362840175628662 seconds

LR changed during epoch: 3.56e-04 -> 3.55e-04

total runtime to train this model was 25.368823051452637 seconds

Hyperparameteres for model 4 at epoch 8

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4952633380889893 seconds

Loss: 1.3254

Train Accuracy: 51.84%

Test Accuracy: 53.57%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 8 Summary:

=====

Time: 153.48s (Avg member: 30.69s)

Population Mean Accuracy: 53.59%

Best Member Accuracy: 54.35%

Mean Batch Size: 256

Mean Learning Rate: 3.30e-04

Mean Weight Decay: 0.099

=====

Epoch 9/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.642091989517212 seconds

LR changed during epoch: 1.50e-04 -> 2.00e-04

total runtime to train this model was 26.802325963974 seconds

Hyperparameteres for model 0 at epoch 9

lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3731255531311035 seconds

Loss: 1.2884

Train Accuracy: 53.20%

Test Accuracy: 54.67%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5756995677947998 seconds

LR changed during epoch: 2.60e-04 -> 2.59e-04

total runtime to train this model was 26.794981718063354 seconds

Hyperparameteres for model 1 at epoch 9

lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4135775566101074 seconds

Loss: 1.3148

Train Accuracy: 52.27%

Test Accuracy: 54.12%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.603440284729004 seconds

LR changed during epoch: 4.63e-04 -> 4.61e-04

total runtime to train this model was 26.434710025787354 seconds

Hyperparameteres for model 2 at epoch 9

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3121118545532227 seconds

Loss: 1.2695

Train Accuracy: 54.26%

Test Accuracy: 56.09%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5994436740875244 seconds

LR changed during epoch: 3.14e-04 -> 3.13e-04

total runtime to train this model was 26.139124155044556 seconds

Hyperparameteres for model 3 at epoch 9

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.834318161010742 seconds

Loss: 1.2853

Train Accuracy: 53.54%

Test Accuracy: 56.02%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.8029487133026123 seconds

LR changed during epoch: 3.55e-04 -> 3.53e-04

total runtime to train this model was 26.03259801864624 seconds

Hyperparameteres for model 4 at epoch 9

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7663798332214355 seconds

Loss: 1.2783

Train Accuracy: 53.61%

Test Accuracy: 55.45%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

```
=====
Epoch 9 Summary:
=====
```

Time: 154.43s (Avg member: 30.89s)
Population Mean Accuracy: 55.27%
Best Member Accuracy: 56.09%
Mean Batch Size: 256
Mean Learning Rate: 3.30e-04
Mean Weight Decay: 0.099

```
=====
Epoch 10/70
=====
```

--- Training Member 0 (Batch size: 256) ---

built data in 1.6128654479980469 seconds
LR changed during epoch: 2.00e-04 -> 2.50e-04
total runtime to train this model was 26.746585845947266 seconds
Hyperparameteres for model 0 at epoch 10
lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3706326484680176 seconds

Loss: 1.2807
Train Accuracy: 53.43%
Test Accuracy: 55.88%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6289575099945068 seconds
LR changed during epoch: 2.59e-04 -> 2.57e-04
total runtime to train this model was 26.425792694091797 seconds
Hyperparameteres for model 1 at epoch 10
lr: 0.0002610457762689696

weight_decay: 0.13313120688671945

drop_path: 0.2988852362414701

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.294210910797119 seconds

Loss: 1.2740
Train Accuracy: 53.87%
Test Accuracy: 54.76%
Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5671615600585938 seconds
LR changed during epoch: 4.61e-04 -> 4.59e-04
total runtime to train this model was 26.520876169204712 seconds
Hyperparameteres for model 2 at epoch 10
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3780393600463867 seconds
Loss: 1.2340
Train Accuracy: 55.45%
Test Accuracy: 56.43%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7257695198059082 seconds
LR changed during epoch: 3.13e-04 -> 3.11e-04
total runtime to train this model was 25.807472705841064 seconds
Hyperparameteres for model 3 at epoch 10
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4661576747894287 seconds
Loss: 1.2569
Train Accuracy: 54.57%
Test Accuracy: 55.42%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6252317428588867 seconds
LR changed during epoch: 3.53e-04 -> 3.51e-04
total runtime to train this model was 26.63207244873047 seconds
Hyperparameteres for model 4 at epoch 10
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4368932247161865 seconds

Loss: 1.2428
Train Accuracy: 55.16%
Test Accuracy: 55.87%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 10) ---

==== PBT Exploit & Explore ====

Top performers: [56.43]

Bottom performers: [54.76]

Member 1: lr changed from 0.0002610457762689696 to 0.0003427319743126133
Member 1: weight_decay changed from 0.13313120688671945 to 0.14486549984501243
Member 1: drop_path changed from 0.2988852362414701 to 0.24699356886423965
Member 1 copied from 2

LR=3.43e-04, WD=0.145, DropPath=0.247, Warmup=5 epochs, Batch=256

=====

Epoch 10 Summary:

=====

Time: 154.61s (Avg member: 30.92s)

Population Mean Accuracy: 55.67%

Best Member Accuracy: 56.43%

Mean Batch Size: 256

Mean Learning Rate: 3.46e-04

Mean Weight Decay: 0.102

=====

Epoch 11/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5837740898132324 seconds

LR changed during epoch: 2.50e-04 -> 2.50e-04

total runtime to train this model was 26.40943145751953 seconds

Hyperparameteres for model 0 at epoch 11

lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.312807321548462 seconds

Loss: 1.2536

Train Accuracy: 54.38%

Test Accuracy: 57.71%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5798451900482178 seconds

LR changed during epoch: 3.50e-07 -> 6.89e-05

total runtime to train this model was 26.615558385849 seconds

Hyperparameteres for model 1 at epoch 11

lr: 0.0003427319743126133

weight_decay: 0.14486549984501243

drop_path: 0.24699356886423965

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.2926089763641357 seconds

Loss: 1.1394

Train Accuracy: 59.14%

Test Accuracy: 60.19%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5755836963653564 seconds

LR changed during epoch: 4.59e-04 -> 4.56e-04

total runtime to train this model was 27.295238971710205 seconds

Hyperparameteres for model 2 at epoch 11

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.115457057952881 seconds

Loss: 1.1913

Train Accuracy: 56.87%

Test Accuracy: 58.05%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.73716139793396 seconds

LR changed during epoch: 3.11e-04 -> 3.09e-04

total runtime to train this model was 26.788550853729248 seconds

Hyperparameteres for model 3 at epoch 11

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6666712760925293 seconds

Loss: 1.2176

Train Accuracy: 56.12%

Test Accuracy: 56.81%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6176033020019531 seconds
LR changed during epoch: 3.51e-04 -> 3.49e-04
total runtime to train this model was 27.002293586730957 seconds
Hyperparameteres for model 4 at epoch 11
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3220102787017822 seconds
Loss: 1.2204
Train Accuracy: 56.09%
Test Accuracy: 57.74%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====
Epoch 11 Summary:
=====

Time: 156.20s (Avg member: 31.24s)
Population Mean Accuracy: 58.10%
Best Member Accuracy: 60.19%
Mean Batch Size: 256
Mean Learning Rate: 3.46e-04
Mean Weight Decay: 0.102

=====
Epoch 12/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6379773616790771 seconds
LR changed during epoch: 2.50e-04 -> 2.50e-04
total runtime to train this model was 26.907582998275757 seconds
Hyperparameteres for model 0 at epoch 12
lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4307522773742676 seconds
Loss: 1.2108
Train Accuracy: 56.28%
Test Accuracy: 56.09%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6778042316436768 seconds
LR changed during epoch: 6.89e-05 -> 1.37e-04

total runtime to train this model was 26.50778341293335 seconds

Hyperparameteres for model 1 at epoch 12

lr: 0.0003427319743126133

weight_decay: 0.14486549984501243

drop_path: 0.24699356886423965

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.244969367980957 seconds

Loss: 1.1050

Train Accuracy: 60.45%

Test Accuracy: 60.71%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6200809478759766 seconds

LR changed during epoch: 4.56e-04 -> 4.53e-04

total runtime to train this model was 26.66570782661438 seconds

Hyperparameteres for model 2 at epoch 12

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3575541973114014 seconds

Loss: 1.1515

Train Accuracy: 58.75%

Test Accuracy: 59.93%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.59006929397583 seconds

LR changed during epoch: 3.09e-04 -> 3.07e-04

total runtime to train this model was 27.013280630111694 seconds

Hyperparameteres for model 3 at epoch 12

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.312634229660034 seconds

Loss: 1.1857

Train Accuracy: 57.25%

Test Accuracy: 59.20%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.56532883644104 seconds
LR changed during epoch: 3.49e-04 -> 3.46e-04
total runtime to train this model was 26.82038187980652 seconds
Hyperparameteres for model 4 at epoch 12
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4175028800964355 seconds
Loss: 1.1772
Train Accuracy: 57.69%
Test Accuracy: 59.06%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 12 Summary:

=====

Time: 156.08s (Avg member: 31.22s)
Population Mean Accuracy: 59.00%
Best Member Accuracy: 60.71%
Mean Batch Size: 256
Mean Learning Rate: 3.46e-04
Mean Weight Decay: 0.102

=====

Epoch 13/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6167523860931396 seconds
LR changed during epoch: 2.50e-04 -> 2.49e-04
total runtime to train this model was 27.02082896232605 seconds
Hyperparameteres for model 0 at epoch 13
lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.13093900680542 seconds
Loss: 1.1776
Train Accuracy: 57.59%
Test Accuracy: 59.12%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.700416088104248 seconds

LR changed during epoch: 1.37e-04 -> 2.06e-04

total runtime to train this model was 26.736520290374756 seconds

Hyperparameteres for model 1 at epoch 13

lr: 0.0003427319743126133

weight_decay: 0.14486549984501243

drop_path: 0.24699356886423965

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.448059558868408 seconds

Loss: 1.1000

Train Accuracy: 60.51%

Test Accuracy: 60.01%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5802693367004395 seconds

LR changed during epoch: 4.53e-04 -> 4.49e-04

total runtime to train this model was 26.40647029876709 seconds

Hyperparameteres for model 2 at epoch 13

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.339047431945801 seconds

Loss: 1.1125

Train Accuracy: 60.07%

Test Accuracy: 61.50%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5649304389953613 seconds

LR changed during epoch: 3.07e-04 -> 3.04e-04

total runtime to train this model was 26.641897916793823 seconds

Hyperparameteres for model 3 at epoch 13

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3577847480773926 seconds

Loss: 1.1592
Train Accuracy: 58.59%
Test Accuracy: 57.92%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5836830139160156 seconds

LR changed during epoch: 3.46e-04 -> 3.43e-04
total runtime to train this model was 26.888514280319214 seconds

Hyperparameteres for model 4 at epoch 13

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6528918743133545 seconds

Loss: 1.1457
Train Accuracy: 59.03%
Test Accuracy: 60.27%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 13 Summary:

=====

Time: 156.04s (Avg member: 31.21s)

Population Mean Accuracy: 59.76%

Best Member Accuracy: 61.50%

Mean Batch Size: 256

Mean Learning Rate: 3.46e-04

Mean Weight Decay: 0.102

=====

Epoch 14/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.7380259037017822 seconds

LR changed during epoch: 2.49e-04 -> 2.48e-04
total runtime to train this model was 25.903518438339233 seconds

Hyperparameteres for model 0 at epoch 14

lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.0368733406066895 seconds

Loss: 1.1503

Train Accuracy: 58.72%

Test Accuracy: 60.13%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5783112049102783 seconds

LR changed during epoch: 2.06e-04 -> 2.75e-04

total runtime to train this model was 26.56745743751526 seconds

Hyperparameteres for model 1 at epoch 14

lr: 0.0003427319743126133

weight_decay: 0.14486549984501243

drop_path: 0.24699356886423965

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3473408222198486 seconds

Loss: 1.1013

Train Accuracy: 60.48%

Test Accuracy: 61.02%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5656623840332031 seconds

LR changed during epoch: 4.49e-04 -> 4.44e-04

total runtime to train this model was 26.420289993286133 seconds

Hyperparameteres for model 2 at epoch 14

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.34688663482666 seconds

Loss: 1.0780

Train Accuracy: 61.45%

Test Accuracy: 62.36%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.584536075592041 seconds

LR changed during epoch: 3.04e-04 -> 3.01e-04

total runtime to train this model was 26.561259031295776 seconds

Hyperparameteres for model 3 at epoch 14

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3439061641693115 seconds

Loss: 1.1149

Train Accuracy: 60.17%

Test Accuracy: 60.42%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.7978029251098633 seconds

LR changed during epoch: 3.43e-04 -> 3.40e-04

total runtime to train this model was 25.42864727973938 seconds

Hyperparameteres for model 4 at epoch 14

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2349956035614014 seconds

Loss: 1.1147

Train Accuracy: 60.02%

Test Accuracy: 61.83%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 14 Summary:

=====

Time: 153.77s (Avg member: 30.75s)

Population Mean Accuracy: 61.15%

Best Member Accuracy: 62.36%

Mean Batch Size: 256

Mean Learning Rate: 3.46e-04

Mean Weight Decay: 0.102

=====

Epoch 15/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.7104518413543701 seconds

LR changed during epoch: 2.48e-04 -> 2.47e-04

total runtime to train this model was 26.689948320388794 seconds

Hyperparameteres for model 0 at epoch 15

lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.329887866973877 seconds

Loss: 1.1219

Train Accuracy: 59.68%

Test Accuracy: 61.66%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6405980587005615 seconds

LR changed during epoch: 2.75e-04 -> 3.43e-04

total runtime to train this model was 26.19038987159729 seconds

Hyperparameteres for model 1 at epoch 15

lr: 0.0003427319743126133

weight_decay: 0.14486549984501243

drop_path: 0.24699356886423965

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.339176893234253 seconds

Loss: 1.0995

Train Accuracy: 61.00%

Test Accuracy: 60.53%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6893525123596191 seconds

LR changed during epoch: 4.44e-04 -> 4.39e-04

total runtime to train this model was 26.311910390853882 seconds

Hyperparameteres for model 2 at epoch 15

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.327899217605591 seconds

Loss: 1.0487

Train Accuracy: 62.49%

Test Accuracy: 63.57%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.634824275970459 seconds

LR changed during epoch: 3.01e-04 -> 2.98e-04

total runtime to train this model was 26.281763553619385 seconds

Hyperparameteres for model 3 at epoch 15

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.7494242191314697 seconds

Loss: 1.0893

Train Accuracy: 60.97%

Test Accuracy: 61.36%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.8294141292572021 seconds

LR changed during epoch: 3.40e-04 -> 3.36e-04

total runtime to train this model was 25.712960720062256 seconds

Hyperparameteres for model 4 at epoch 15

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.248114585876465 seconds

Loss: 1.0883

Train Accuracy: 61.06%

Test Accuracy: 62.29%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 15) ---

==== PBT Exploit & Explore ===

Top performers: [63.57]

Bottom performers: [60.53]

Member 1: lr changed from 0.0003427319743126133 to 0.00046471149112560484

Member 1: weight_decay changed from 0.14486549984501243 to 0.14414943068002736

Member 1: drop_path changed from 0.24699356886423965 to 0.20445731227971572

Member 1 copied from 2

LR=4.65e-04, WD=0.144, DropPath=0.204, Warmup=5 epochs, Batch=256

=====

Epoch 15 Summary:

=====

Time: 154.04s (Avg member: 30.81s)

Population Mean Accuracy: 61.88%

Best Member Accuracy: 63.57%

Mean Batch Size: 256

Mean Learning Rate: 3.71e-04

Mean Weight Decay: 0.102

```
=====
Epoch 16/70
=====
```

--- Training Member 0 (Batch size: 256) ---
built data in 1.5640854835510254 seconds
LR changed during epoch: 2.47e-04 -> 2.45e-04
total runtime to train this model was 26.489152193069458 seconds
Hyperparameteres for model 0 at epoch 16
lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.517083168029785 seconds

Loss: 1.0925
Train Accuracy: 60.99%
Test Accuracy: 61.94%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6251909732818604 seconds
LR changed during epoch: 4.74e-07 -> 9.34e-05
total runtime to train this model was 26.50489354133606 seconds
Hyperparameteres for model 1 at epoch 16
lr: 0.00046471149112560484

weight_decay: 0.14414943068002736

drop_path: 0.20445731227971572

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3646771907806396 seconds

Loss: 0.9613
Train Accuracy: 65.72%
Test Accuracy: 66.69%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5602092742919922 seconds
LR changed during epoch: 4.39e-04 -> 4.34e-04
total runtime to train this model was 26.028809070587158 seconds
Hyperparameteres for model 2 at epoch 16
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4729764461517334 seconds

Loss: 1.0270

Train Accuracy: 63.13%

Test Accuracy: 64.74%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7686190605163574 seconds

LR changed during epoch: 2.98e-04 -> 2.94e-04

total runtime to train this model was 25.8040931224823 seconds

Hyperparameteres for model 3 at epoch 16

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5615642070770264 seconds

Loss: 1.0671

Train Accuracy: 61.89%

Test Accuracy: 62.17%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.689607858657837 seconds

LR changed during epoch: 3.36e-04 -> 3.32e-04

total runtime to train this model was 26.43651270866394 seconds

Hyperparameteres for model 4 at epoch 16

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.381448984146118 seconds

Loss: 1.0703

Train Accuracy: 62.01%

Test Accuracy: 62.19%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 16 Summary:

=====

Time: 154.09s (Avg member: 30.82s)

Population Mean Accuracy: 63.55%
Best Member Accuracy: 66.69%
Mean Batch Size: 256
Mean Learning Rate: 3.71e-04
Mean Weight Decay: 0.102

=====
Epoch 17/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.66672945022583 seconds
LR changed during epoch: 2.45e-04 -> 2.43e-04
total runtime to train this model was 26.412973642349243 seconds
Hyperparameteres for model 0 at epoch 17
lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3729867935180664 seconds

Loss: 1.0706
Train Accuracy: 61.99%
Test Accuracy: 62.61%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6414742469787598 seconds
LR changed during epoch: 9.34e-05 -> 1.86e-04
total runtime to train this model was 26.39881992340088 seconds
Hyperparameteres for model 1 at epoch 17
lr: 0.00046471149112560484

weight_decay: 0.14414943068002736

drop_path: 0.20445731227971572

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3740971088409424 seconds

Loss: 0.9413
Train Accuracy: 66.54%
Test Accuracy: 66.66%
Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6253416538238525 seconds
LR changed during epoch: 4.34e-04 -> 4.28e-04
total runtime to train this model was 26.342628955841064 seconds
Hyperparameteres for model 2 at epoch 17
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.970345973968506 seconds

Loss: 0.9923

Train Accuracy: 64.54%

Test Accuracy: 65.58%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7539470195770264 seconds

LR changed during epoch: 2.94e-04 -> 2.90e-04

total runtime to train this model was 25.856324911117554 seconds

Hyperparameteres for model 3 at epoch 17

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8646156787872314 seconds

Loss: 1.0420

Train Accuracy: 62.87%

Test Accuracy: 63.71%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6000218391418457 seconds

LR changed during epoch: 3.32e-04 -> 3.27e-04

total runtime to train this model was 26.69018530845642 seconds

Hyperparameteres for model 4 at epoch 17

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3853061199188232 seconds

Loss: 1.0368

Train Accuracy: 62.72%

Test Accuracy: 63.07%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

```
=====  
Epoch 17 Summary:  
=====
```

Time: 154.26s (Avg member: 30.85s)
Population Mean Accuracy: 64.33%
Best Member Accuracy: 66.66%
Mean Batch Size: 256
Mean Learning Rate: 3.71e-04
Mean Weight Decay: 0.102

```
=====
```

```
Epoch 18/70  
=====
```

--- Training Member 0 (Batch size: 256) ---
built data in 1.5792629718780518 seconds
LR changed during epoch: 2.43e-04 -> 2.41e-04
total runtime to train this model was 26.691972255706787 seconds
Hyperparameteres for model 0 at epoch 18
lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3667235374450684 seconds

Loss: 1.0439
Train Accuracy: 62.74%
Test Accuracy: 64.10%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.59869384765625 seconds

LR changed during epoch: 1.86e-04 -> 2.79e-04
total runtime to train this model was 26.532320261001587 seconds
Hyperparameteres for model 1 at epoch 18

lr: 0.00046471149112560484

weight_decay: 0.14414943068002736

drop_path: 0.20445731227971572

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5108580589294434 seconds

Loss: 0.9560
Train Accuracy: 65.78%
Test Accuracy: 65.36%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.7253780364990234 seconds
LR changed during epoch: 4.28e-04 -> 4.21e-04
total runtime to train this model was 26.20427966117859 seconds
Hyperparameteres for model 2 at epoch 18
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2993502616882324 seconds

Loss: 0.9717
Train Accuracy: 65.25%
Test Accuracy: 65.96%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5995144844055176 seconds
LR changed during epoch: 2.90e-04 -> 2.85e-04
total runtime to train this model was 26.40599012374878 seconds
Hyperparameteres for model 3 at epoch 18
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.281912326812744 seconds

Loss: 1.0210
Train Accuracy: 63.76%
Test Accuracy: 64.20%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6053879261016846 seconds
LR changed during epoch: 3.27e-04 -> 3.23e-04
total runtime to train this model was 26.099607467651367 seconds
Hyperparameteres for model 4 at epoch 18
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.229984760284424 seconds

Loss: 1.0123
Train Accuracy: 64.17%
Test Accuracy: 64.02%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 18 Summary:

=====

Time: 154.06s (Avg member: 30.81s)
Population Mean Accuracy: 64.73%
Best Member Accuracy: 65.96%
Mean Batch Size: 256
Mean Learning Rate: 3.71e-04
Mean Weight Decay: 0.102

=====

Epoch 19/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5705370903015137 seconds
LR changed during epoch: 2.41e-04 -> 2.39e-04
total runtime to train this model was 25.755703449249268 seconds
Hyperparameteres for model 0 at epoch 19
lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3819785118103027 seconds

Loss: 1.0234
Train Accuracy: 63.54%
Test Accuracy: 64.09%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5601139068603516 seconds
LR changed during epoch: 2.79e-04 -> 3.72e-04
total runtime to train this model was 25.77000379562378 seconds
Hyperparameteres for model 1 at epoch 19
lr: 0.00046471149112560484

weight_decay: 0.14414943068002736

drop_path: 0.20445731227971572

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.218234062194824 seconds
Loss: 0.9752
Train Accuracy: 65.23%

Test Accuracy: 64.94%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6922574043273926 seconds
LR changed during epoch: 4.21e-04 -> 4.15e-04
total runtime to train this model was 25.083106994628906 seconds
Hyperparameteres for model 2 at epoch 19
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271
drop_path: 0.21704259365986278
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1638588905334473 seconds
Loss: 0.9492
Train Accuracy: 66.19%
Test Accuracy: 65.91%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6411986351013184 seconds
LR changed during epoch: 2.85e-04 -> 2.81e-04
total runtime to train this model was 25.447788953781128 seconds
Hyperparameteres for model 3 at epoch 19
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257
drop_path: 0.20632463667325823
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.688830614089966 seconds
Loss: 0.9981
Train Accuracy: 64.33%
Test Accuracy: 65.00%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5646677017211914 seconds
LR changed during epoch: 3.23e-04 -> 3.17e-04
total runtime to train this model was 25.958558797836304 seconds
Hyperparameteres for model 4 at epoch 19
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567
drop_path: 0.25432892395471046
warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.327183723449707 seconds

Loss: 0.9991

Train Accuracy: 64.30%

Test Accuracy: 64.80%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 19 Summary:

=====

Time: 150.21s (Avg member: 30.04s)

Population Mean Accuracy: 64.95%

Best Member Accuracy: 65.91%

Mean Batch Size: 256

Mean Learning Rate: 3.71e-04

Mean Weight Decay: 0.102

=====

Epoch 20/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.567960500717163 seconds

LR changed during epoch: 2.39e-04 -> 2.36e-04

total runtime to train this model was 26.378985166549683 seconds

Hyperparameteres for model 0 at epoch 20

lr: 0.0002502213586795585

weight_decay: 0.08121118233594017

drop_path: 0.32647451212245726

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.335798740386963 seconds

Loss: 0.9946

Train Accuracy: 64.57%

Test Accuracy: 64.11%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5450410842895508 seconds

LR changed during epoch: 3.72e-04 -> 4.65e-04

total runtime to train this model was 26.111708164215088 seconds

Hyperparameteres for model 1 at epoch 20

lr: 0.00046471149112560484

weight_decay: 0.14414943068002736

drop_path: 0.20445731227971572

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4008724689483643 seconds

Loss: 0.9860

Train Accuracy: 65.02%

Test Accuracy: 65.70%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.714949131011963 seconds

LR changed during epoch: 4.15e-04 -> 4.07e-04

total runtime to train this model was 25.766616821289062 seconds

Hyperparameteres for model 2 at epoch 20

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.04170298576355 seconds

Loss: 0.9241

Train Accuracy: 67.25%

Test Accuracy: 68.18%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.6684815883636475 seconds

LR changed during epoch: 2.81e-04 -> 2.76e-04

total runtime to train this model was 26.11086344718933 seconds

Hyperparameteres for model 3 at epoch 20

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.8199493885040283 seconds

Loss: 0.9752

Train Accuracy: 65.30%

Test Accuracy: 65.23%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.574167251586914 seconds

LR changed during epoch: 3.17e-04 -> 3.12e-04

total runtime to train this model was 26.939427137374878 seconds

Hyperparameteres for model 4 at epoch 20

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3494162559509277 seconds

Loss: 0.9727

Train Accuracy: 65.18%

Test Accuracy: 66.07%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 20) ---

==== PBT Exploit & Explore ===

Top performers: [68.18]

Bottom performers: [64.11]

Member 0: lr changed from 0.0002502213586795585 to 0.00018945798503857986

Member 0: weight_decay changed from 0.08121118233594017 to 0.10256541999051386

Member 0: drop_path changed from 0.32647451212245726 to 0.3009444390241068

Member 0 copied from 2

LR=1.89e-04, WD=0.103, DropPath=0.301, Warmup=5 epochs, Batch=256

=====

Epoch 20 Summary:

=====

Time: 153.63s (Avg member: 30.72s)

Population Mean Accuracy: 65.86%

Best Member Accuracy: 68.18%

Mean Batch Size: 256

Mean Learning Rate: 3.58e-04

Mean Weight Decay: 0.106

=====

Epoch 21/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.578157663345337 seconds

LR changed during epoch: 1.93e-07 -> 3.81e-05

total runtime to train this model was 26.41202998161316 seconds

Hyperparameteres for model 0 at epoch 21

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.391794204711914 seconds

Loss: 0.8573

Train Accuracy: 69.61%

Test Accuracy: 70.47%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5798096656799316 seconds

LR changed during epoch: 4.65e-04 -> 4.64e-04

total runtime to train this model was 26.598029375076294 seconds

Hyperparameteres for model 1 at epoch 21

lr: 0.00046471149112560484

weight_decay: 0.14414943068002736

drop_path: 0.20445731227971572

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.311249256134033 seconds

Loss: 0.9805

Train Accuracy: 65.14%

Test Accuracy: 65.91%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.7257106304168701 seconds

LR changed during epoch: 4.07e-04 -> 4.00e-04

total runtime to train this model was 25.74740719795227 seconds

Hyperparameteres for model 2 at epoch 21

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.58538818359375 seconds

Loss: 0.9004

Train Accuracy: 67.95%

Test Accuracy: 68.03%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5764861106872559 seconds

LR changed during epoch: 2.76e-04 -> 2.71e-04

total runtime to train this model was 26.442703247070312 seconds

Hyperparameteres for model 3 at epoch 21

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.2900519371032715 seconds

Loss: 0.9507

Train Accuracy: 66.15%

Test Accuracy: 66.29%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5731406211853027 seconds

LR changed during epoch: 3.12e-04 -> 3.06e-04

total runtime to train this model was 26.15913724899292 seconds

Hyperparameteres for model 4 at epoch 21

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.451657772064209 seconds

Loss: 0.9564

Train Accuracy: 65.96%

Test Accuracy: 67.21%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 21 Summary:

=====

Time: 153.76s (Avg member: 30.75s)

Population Mean Accuracy: 67.58%

Best Member Accuracy: 70.47%

Mean Batch Size: 256

Mean Learning Rate: 3.58e-04

Mean Weight Decay: 0.106

=====

Epoch 22/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5786001682281494 seconds

LR changed during epoch: 3.81e-05 -> 7.60e-05

total runtime to train this model was 26.20366072654724 seconds

Hyperparameteres for model 0 at epoch 22

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3630664348602295 seconds

Loss: 0.8199

Train Accuracy: 70.86%

Test Accuracy: 70.86%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5780444145202637 seconds

LR changed during epoch: 4.64e-04 -> 4.64e-04

total runtime to train this model was 26.63308572769165 seconds

Hyperparameteres for model 1 at epoch 22

lr: 0.00046471149112560484

weight_decay: 0.14414943068002736

drop_path: 0.20445731227971572

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.627641439437866 seconds

Loss: 0.9563

Train Accuracy: 66.11%

Test Accuracy: 65.93%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.7317166328430176 seconds

LR changed during epoch: 4.00e-04 -> 3.92e-04

total runtime to train this model was 25.37528395652771 seconds

Hyperparameteres for model 2 at epoch 22

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.3108084201812744 seconds

Loss: 0.8790

Train Accuracy: 68.80%

Test Accuracy: 68.23%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5725369453430176 seconds

LR changed during epoch: 2.71e-04 -> 2.65e-04

total runtime to train this model was 26.599541425704956 seconds

Hyperparameteres for model 3 at epoch 22

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3893678188323975 seconds

Loss: 0.9293

Train Accuracy: 67.08%

Test Accuracy: 67.09%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5941064357757568 seconds

LR changed during epoch: 3.06e-04 -> 3.00e-04

total runtime to train this model was 26.62482523918152 seconds

Hyperparameteres for model 4 at epoch 22

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.408806800842285 seconds

Loss: 0.9320

Train Accuracy: 66.92%

Test Accuracy: 67.28%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 22 Summary:

=====

Time: 153.90s (Avg member: 30.78s)

Population Mean Accuracy: 67.88%

Best Member Accuracy: 70.86%

Mean Batch Size: 256

Mean Learning Rate: 3.58e-04

Mean Weight Decay: 0.106

=====

Epoch 23/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.569917917251587 seconds

LR changed during epoch: 7.60e-05 -> 1.14e-04

total runtime to train this model was 26.507084369659424 seconds

Hyperparameteres for model 0 at epoch 23

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.481417179107666 seconds

Loss: 0.8087

Train Accuracy: 71.25%

Test Accuracy: 70.31%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.7408409118652344 seconds

LR changed during epoch: 4.64e-04 -> 4.62e-04

total runtime to train this model was 26.176355361938477 seconds

Hyperparameteres for model 1 at epoch 23

lr: 0.00046471149112560484

weight_decay: 0.14414943068002736

drop_path: 0.20445731227971572

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0856497287750244 seconds

Loss: 0.9370

Train Accuracy: 66.69%

Test Accuracy: 67.09%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5709729194641113 seconds

LR changed during epoch: 3.92e-04 -> 3.83e-04

total runtime to train this model was 26.36216378211975 seconds

Hyperparameteres for model 2 at epoch 23

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3246374130249023 seconds

Loss: 0.8598

Train Accuracy: 69.50%

Test Accuracy: 69.74%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5682709217071533 seconds

LR changed during epoch: 2.65e-04 -> 2.60e-04

total runtime to train this model was 26.331483125686646 seconds

Hyperparameteres for model 3 at epoch 23

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3412861824035645 seconds

Loss: 0.9183

Train Accuracy: 67.37%

Test Accuracy: 68.25%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5699212551116943 seconds

LR changed during epoch: 3.00e-04 -> 2.93e-04

total runtime to train this model was 26.16657567024231 seconds

Hyperparameteres for model 4 at epoch 23

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4654037952423096 seconds

Loss: 0.9159

Train Accuracy: 67.43%

Test Accuracy: 67.52%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 23 Summary:

=====

Time: 153.63s (Avg member: 30.73s)

Population Mean Accuracy: 68.58%

Best Member Accuracy: 70.31%

Mean Batch Size: 256

Mean Learning Rate: 3.58e-04

Mean Weight Decay: 0.106

=====

Epoch 24/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.6806409358978271 seconds

LR changed during epoch: 1.14e-04 -> 1.52e-04

total runtime to train this model was 26.021406888961792 seconds

Hyperparameteres for model 0 at epoch 24

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1838433742523193 seconds

Loss: 0.8119

Train Accuracy: 71.16%

Test Accuracy: 71.10%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6162939071655273 seconds

LR changed during epoch: 4.62e-04 -> 4.60e-04

total runtime to train this model was 26.464791297912598 seconds

Hyperparameteres for model 1 at epoch 24

lr: 0.00046471149112560484

weight_decay: 0.14414943068002736

drop_path: 0.20445731227971572

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3337464332580566 seconds

Loss: 0.9151

Train Accuracy: 67.58%

Test Accuracy: 67.08%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5807619094848633 seconds

LR changed during epoch: 3.83e-04 -> 3.74e-04

total runtime to train this model was 26.39828085899353 seconds

Hyperparameteres for model 2 at epoch 24

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.36029314994812 seconds

Loss: 0.8399

Train Accuracy: 70.43%

Test Accuracy: 69.34%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

```
--- Training Member 3 (Batch size: 256) ---
built data in 1.6028008460998535 seconds
LR changed during epoch: 2.60e-04 -> 2.54e-04
total runtime to train this model was 26.422961473464966 seconds
Hyperparameteres for model 3 at epoch 24
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257
drop_path: 0.20632463667325823
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.533345937728882 seconds
Loss: 0.8931
Train Accuracy: 68.25%
Test Accuracy: 67.53%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt
```

```
--- Training Member 4 (Batch size: 256) ---
built data in 1.7450487613677979 seconds
LR changed during epoch: 2.93e-04 -> 2.87e-04
total runtime to train this model was 25.662790536880493 seconds
Hyperparameteres for model 4 at epoch 24
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567
drop_path: 0.25432892395471046
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2135307788848877 seconds
Loss: 0.8986
Train Accuracy: 68.16%
Test Accuracy: 68.22%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt
```

```
=====
Epoch 24 Summary:
=====
```

```
Time: 154.10s (Avg member: 30.82s)
Population Mean Accuracy: 68.65%
Best Member Accuracy: 71.10%
Mean Batch Size: 256
Mean Learning Rate: 3.58e-04
Mean Weight Decay: 0.106
```

```
=====
Epoch 25/70
=====
```

```
--- Training Member 0 (Batch size: 256) ---
```

built data in 1.6001389026641846 seconds
LR changed during epoch: 1.52e-04 -> 1.89e-04
total runtime to train this model was 26.309934854507446 seconds
Hyperparameteres for model 0 at epoch 25
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386
drop_path: 0.3009444390241068
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.366532564163208 seconds
Loss: 0.8062
Train Accuracy: 71.56%
Test Accuracy: 71.09%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5896384716033936 seconds
LR changed during epoch: 4.60e-04 -> 4.58e-04
total runtime to train this model was 26.259544372558594 seconds
Hyperparameteres for model 1 at epoch 25
lr: 0.00046471149112560484

weight_decay: 0.14414943068002736
drop_path: 0.20445731227971572
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.352902889251709 seconds
Loss: 0.8963
Train Accuracy: 68.25%
Test Accuracy: 67.65%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.575303316116333 seconds
LR changed during epoch: 3.74e-04 -> 3.65e-04
total runtime to train this model was 26.597763061523438 seconds
Hyperparameteres for model 2 at epoch 25
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271
drop_path: 0.21704259365986278
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.617412805557251 seconds

Loss: 0.8139
Train Accuracy: 71.03%
Test Accuracy: 71.58%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7278454303741455 seconds
LR changed during epoch: 2.54e-04 -> 2.48e-04
total runtime to train this model was 25.9694242477417 seconds
Hyperparameteres for model 3 at epoch 25
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257
drop_path: 0.20632463667325823
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.964078664779663 seconds
Loss: 0.8757
Train Accuracy: 68.98%
Test Accuracy: 68.24%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5755188465118408 seconds
LR changed during epoch: 2.87e-04 -> 2.80e-04
total runtime to train this model was 26.18316125869751 seconds
Hyperparameteres for model 4 at epoch 25
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567
drop_path: 0.25432892395471046
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3200783729553223 seconds
Loss: 0.8855
Train Accuracy: 68.61%
Test Accuracy: 68.07%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 25) ---

==== PBT Exploit & Explore ====
Top performers: [71.58]
Bottom performers: [67.65]
Member 1: lr changed from 0.00046471149112560484 to 0.000509188071667745
Member 1: weight_decay changed from 0.14414943068002736 to 0.15
Member 1: drop_path changed from 0.20445731227971572 to 0.18655812482800194
Member 1 copied from 2
LR=5.09e-04, WD=0.150, DropPath=0.187, Warmup=5 epochs, Batch=256

```
=====
Epoch 25 Summary:
=====
```

Time: 153.31s (Avg member: 30.66s)
Population Mean Accuracy: 69.33%
Best Member Accuracy: 71.58%
Mean Batch Size: 256
Mean Learning Rate: 3.67e-04
Mean Weight Decay: 0.107

```
=====
Epoch 26/70
=====
```

--- Training Member 0 (Batch size: 256) ---
built data in 1.5642499923706055 seconds
LR changed during epoch: 1.89e-04 -> 1.89e-04
total runtime to train this model was 26.22417688369751 seconds
Hyperparameteres for model 0 at epoch 26
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.406669855117798 seconds

Loss: 0.8069
Train Accuracy: 71.54%
Test Accuracy: 71.60%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.573256492614746 seconds
LR changed during epoch: 5.20e-07 -> 1.02e-04
total runtime to train this model was 26.31139087677002 seconds
Hyperparameteres for model 1 at epoch 26
lr: 0.000509188071667745

weight_decay: 0.15

drop_path: 0.18655812482800194

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.748926877975464 seconds

Loss: 0.7486
Train Accuracy: 73.56%
Test Accuracy: 73.45%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.7019431591033936 seconds
LR changed during epoch: 3.65e-04 -> 3.56e-04
total runtime to train this model was 25.761359453201294 seconds
Hyperparameteres for model 2 at epoch 26
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.788705825805664 seconds

Loss: 0.7972
Train Accuracy: 71.67%
Test Accuracy: 72.06%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5711627006530762 seconds
LR changed during epoch: 2.48e-04 -> 2.41e-04
total runtime to train this model was 26.218986988067627 seconds
Hyperparameteres for model 3 at epoch 26
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3589956760406494 seconds

Loss: 0.8648
Train Accuracy: 69.46%
Test Accuracy: 69.69%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5789997577667236 seconds
LR changed during epoch: 2.80e-04 -> 2.73e-04
total runtime to train this model was 26.24207329750061 seconds
Hyperparameteres for model 4 at epoch 26
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3313677310943604 seconds

Loss: 0.8702
Train Accuracy: 68.85%
Test Accuracy: 69.21%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====
Epoch 26 Summary:
=====

Time: 152.71s (Avg member: 30.54s)
Population Mean Accuracy: 71.20%
Best Member Accuracy: 73.45%
Mean Batch Size: 256
Mean Learning Rate: 3.67e-04
Mean Weight Decay: 0.107

=====
Epoch 27/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.575096845626831 seconds
LR changed during epoch: 1.89e-04 -> 1.89e-04
total runtime to train this model was 26.407313108444214 seconds
Hyperparameteres for model 0 at epoch 27
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.9569127559661865 seconds

Loss: 0.7921
Train Accuracy: 71.86%
Test Accuracy: 71.69%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7069246768951416 seconds
LR changed during epoch: 1.02e-04 -> 2.04e-04
total runtime to train this model was 26.346303939819336 seconds
Hyperparameteres for model 1 at epoch 27
lr: 0.000509188071667745

weight_decay: 0.15

drop_path: 0.18655812482800194

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3796820640563965 seconds
Loss: 0.7346
Train Accuracy: 73.79%

Test Accuracy: 73.03%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5844464302062988 seconds
LR changed during epoch: 3.56e-04 -> 3.46e-04
total runtime to train this model was 26.349730968475342 seconds
Hyperparameteres for model 2 at epoch 27
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271
drop_path: 0.21704259365986278
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3608312606811523 seconds
Loss: 0.7785
Train Accuracy: 72.34%
Test Accuracy: 72.03%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.604691982269287 seconds
LR changed during epoch: 2.41e-04 -> 2.35e-04
total runtime to train this model was 26.280229330062866 seconds
Hyperparameteres for model 3 at epoch 27
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257
drop_path: 0.20632463667325823
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.443181037902832 seconds
Loss: 0.8416
Train Accuracy: 70.20%
Test Accuracy: 69.97%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.671048879623413 seconds
LR changed during epoch: 2.73e-04 -> 2.65e-04
total runtime to train this model was 26.265260219573975 seconds
Hyperparameteres for model 4 at epoch 27
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567
drop_path: 0.25432892395471046
warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5389721393585205 seconds

Loss: 0.8565

Train Accuracy: 69.67%

Test Accuracy: 69.22%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 27 Summary:

=====

Time: 154.81s (Avg member: 30.96s)

Population Mean Accuracy: 71.19%

Best Member Accuracy: 73.03%

Mean Batch Size: 256

Mean Learning Rate: 3.67e-04

Mean Weight Decay: 0.107

=====

Epoch 28/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5795619487762451 seconds

LR changed during epoch: 1.89e-04 -> 1.88e-04

total runtime to train this model was 26.123232126235962 seconds

Hyperparameteres for model 0 at epoch 28

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3437442779541016 seconds

Loss: 0.7816

Train Accuracy: 72.36%

Test Accuracy: 72.39%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5758843421936035 seconds

LR changed during epoch: 2.04e-04 -> 3.06e-04

total runtime to train this model was 26.542332410812378 seconds

Hyperparameteres for model 1 at epoch 28

lr: 0.000509188071667745

weight_decay: 0.15

drop_path: 0.18655812482800194

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.36374831199646 seconds

Loss: 0.7614

Train Accuracy: 73.06%

Test Accuracy: 72.33%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5567989349365234 seconds

LR changed during epoch: 3.46e-04 -> 3.36e-04

total runtime to train this model was 27.32148289680481 seconds

Hyperparameteres for model 2 at epoch 28

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.417222738265991 seconds

Loss: 0.7629

Train Accuracy: 73.16%

Test Accuracy: 72.21%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7488384246826172 seconds

LR changed during epoch: 2.35e-04 -> 2.28e-04

total runtime to train this model was 26.895905017852783 seconds

Hyperparameteres for model 3 at epoch 28

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.0204014778137207 seconds

Loss: 0.8247

Train Accuracy: 70.88%

Test Accuracy: 70.78%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.632472276687622 seconds

LR changed during epoch: 2.65e-04 -> 2.57e-04

total runtime to train this model was 27.05953860282898 seconds

Hyperparameteres for model 4 at epoch 28

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3745012283325195 seconds

Loss: 0.8393

Train Accuracy: 70.43%

Test Accuracy: 70.07%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====
Epoch 28 Summary:
=====

Time: 155.85s (Avg member: 31.17s)

Population Mean Accuracy: 71.56%

Best Member Accuracy: 72.39%

Mean Batch Size: 256

Mean Learning Rate: 3.67e-04

Mean Weight Decay: 0.107

=====
Epoch 29/70
=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.6002910137176514 seconds

LR changed during epoch: 1.88e-04 -> 1.88e-04

total runtime to train this model was 26.74964475631714 seconds

Hyperparameteres for model 0 at epoch 29

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4278945922851562 seconds

Loss: 0.7745

Train Accuracy: 72.51%

Test Accuracy: 72.35%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.653000831604004 seconds

LR changed during epoch: 3.06e-04 -> 4.08e-04

total runtime to train this model was 25.83374547958374 seconds

Hyperparameteres for model 1 at epoch 29

lr: 0.000509188071667745

weight_decay: 0.15

drop_path: 0.18655812482800194

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.157550573348999 seconds

Loss: 0.7889

Train Accuracy: 72.04%

Test Accuracy: 71.49%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.650240421295166 seconds

LR changed during epoch: 3.36e-04 -> 3.26e-04

total runtime to train this model was 26.346240758895874 seconds

Hyperparameteres for model 2 at epoch 29

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.533064603805542 seconds

Loss: 0.7451

Train Accuracy: 73.58%

Test Accuracy: 72.37%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5897295475006104 seconds

LR changed during epoch: 2.28e-04 -> 2.21e-04

total runtime to train this model was 26.63533902168274 seconds

Hyperparameteres for model 3 at epoch 29

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.477818250656128 seconds

Loss: 0.8110

Train Accuracy: 71.13%

Test Accuracy: 70.93%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5859148502349854 seconds

LR changed during epoch: 2.57e-04 -> 2.50e-04
total runtime to train this model was 26.550309896469116 seconds
Hyperparameteres for model 4 at epoch 29
lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.622804880142212 seconds

Loss: 0.8252
Train Accuracy: 70.53%
Test Accuracy: 70.70%
Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 29 Summary:

=====
Time: 154.77s (Avg member: 30.95s)
Population Mean Accuracy: 71.57%
Best Member Accuracy: 72.37%
Mean Batch Size: 256
Mean Learning Rate: 3.67e-04
Mean Weight Decay: 0.107

=====

Epoch 30/70

=====
--- Training Member 0 (Batch size: 256) ---
built data in 1.717315673828125 seconds
LR changed during epoch: 1.88e-04 -> 1.87e-04
total runtime to train this model was 26.60366177558899 seconds
Hyperparameteres for model 0 at epoch 30
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.072219133377075 seconds

Loss: 0.7596
Train Accuracy: 73.07%
Test Accuracy: 72.43%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5860304832458496 seconds
LR changed during epoch: 4.08e-04 -> 5.09e-04
total runtime to train this model was 27.137816429138184 seconds

Hyperparameteres for model 1 at epoch 30

lr: 0.000509188071667745

weight_decay: 0.15

drop_path: 0.18655812482800194

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.358583927154541 seconds

Loss: 0.8171

Train Accuracy: 71.00%

Test Accuracy: 71.21%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5601177215576172 seconds

LR changed during epoch: 3.26e-04 -> 3.16e-04

total runtime to train this model was 26.613900184631348 seconds

Hyperparameteres for model 2 at epoch 30

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3999481201171875 seconds

Loss: 0.7290

Train Accuracy: 74.16%

Test Accuracy: 73.58%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.633598804473877 seconds

LR changed during epoch: 2.21e-04 -> 2.14e-04

total runtime to train this model was 26.373096227645874 seconds

Hyperparameteres for model 3 at epoch 30

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.208118200302124 seconds

Loss: 0.8017

Train Accuracy: 71.66%

Test Accuracy: 72.03%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6536808013916016 seconds

LR changed during epoch: 2.50e-04 -> 2.42e-04

total runtime to train this model was 26.65915012359619 seconds

Hyperparameteres for model 4 at epoch 30

lr: 0.0003565125943597626

weight_decay: 0.13274485841923567

drop_path: 0.25432892395471046

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3643746376037598 seconds

Loss: 0.8111

Train Accuracy: 71.19%

Test Accuracy: 70.49%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 30) ---

==== PBT Exploit & Explore ===

Top performers: [73.58]

Bottom performers: [70.49]

Member 4: lr changed from 0.0003565125943597626 to 0.0002758766418360161

Member 4: weight_decay changed from 0.13274485841923567 to 0.15

Member 4: drop_path changed from 0.25432892395471046 to 0.3260486304554311

Member 4 copied from 2

LR=2.76e-04, WD=0.150, DropPath=0.326, Warmup=5 epochs, Batch=256

=====

Epoch 30 Summary:

=====

Time: 156.23s (Avg member: 31.24s)

Population Mean Accuracy: 71.95%

Best Member Accuracy: 73.58%

Mean Batch Size: 256

Mean Learning Rate: 3.51e-04

Mean Weight Decay: 0.111

=====

Epoch 31/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5823218822479248 seconds

LR changed during epoch: 1.87e-04 -> 1.86e-04

total runtime to train this model was 26.44183659553528 seconds

Hyperparameteres for model 0 at epoch 31

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.346022844314575 seconds

Loss: 0.7524

Train Accuracy: 73.41%

Test Accuracy: 72.41%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5613453388214111 seconds

LR changed during epoch: 5.09e-04 -> 5.09e-04

total runtime to train this model was 26.12898063659668 seconds

Hyperparameteres for model 1 at epoch 31

lr: 0.000509188071667745

weight_decay: 0.15

drop_path: 0.18655812482800194

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.390446662902832 seconds

Loss: 0.8187

Train Accuracy: 70.96%

Test Accuracy: 70.95%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6809782981872559 seconds

LR changed during epoch: 3.16e-04 -> 3.05e-04

total runtime to train this model was 26.183529138565063 seconds

Hyperparameteres for model 2 at epoch 31

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5414211750030518 seconds

Loss: 0.7111

Train Accuracy: 74.80%

Test Accuracy: 73.99%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.6077492237091064 seconds

LR changed during epoch: 2.14e-04 -> 2.07e-04

total runtime to train this model was 26.20739245414734 seconds

Hyperparameteres for model 3 at epoch 31

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.36946439743042 seconds

Loss: 0.7806

Train Accuracy: 72.53%

Test Accuracy: 72.13%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6126699447631836 seconds

LR changed during epoch: 2.82e-07 -> 5.55e-05

total runtime to train this model was 26.52899169921875 seconds

Hyperparameteres for model 4 at epoch 31

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3462133407592773 seconds

Loss: 0.6656

Train Accuracy: 76.40%

Test Accuracy: 75.23%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 31 Summary:

=====

Time: 153.80s (Avg member: 30.76s)

Population Mean Accuracy: 72.94%

Best Member Accuracy: 75.23%

Mean Batch Size: 256

Mean Learning Rate: 3.51e-04

Mean Weight Decay: 0.111

=====

Epoch 32/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.581188440322876 seconds

LR changed during epoch: 1.86e-04 -> 1.84e-04

total runtime to train this model was 26.415167331695557 seconds

Hyperparameteres for model 0 at epoch 32

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386
drop_path: 0.3009444390241068
warmup_epochs: 5
batch_size: 256
_____ end of hyperparam printing _____
evaluation in 2.3309688568115234 seconds
Loss: 0.7361
Train Accuracy: 73.68%
Test Accuracy: 73.02%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt
--- Training Member 1 (Batch size: 256) ---
built data in 1.6959185600280762 seconds
LR changed during epoch: 5.09e-04 -> 5.08e-04
total runtime to train this model was 26.53542137145996 seconds
Hyperparameteres for model 1 at epoch 32
lr: 0.000509188071667745
weight_decay: 0.15
drop_path: 0.18655812482800194
warmup_epochs: 5
batch_size: 256
_____ end of hyperparam printing _____
evaluation in 3.401935338973999 seconds
Loss: 0.8044
Train Accuracy: 71.40%
Test Accuracy: 72.01%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt
--- Training Member 2 (Batch size: 256) ---
built data in 1.5924065113067627 seconds
LR changed during epoch: 3.05e-04 -> 2.94e-04
total runtime to train this model was 27.353421926498413 seconds
Hyperparameteres for model 2 at epoch 32
lr: 0.00046580972075259094
weight_decay: 0.04163760518412271
drop_path: 0.21704259365986278
warmup_epochs: 5
batch_size: 256
_____ end of hyperparam printing _____
evaluation in 2.4107635021209717 seconds
Loss: 0.6935
Train Accuracy: 75.54%
Test Accuracy: 73.88%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5957975387573242 seconds
LR changed during epoch: 2.07e-04 -> 2.00e-04
total runtime to train this model was 27.003751516342163 seconds
Hyperparameteres for model 3 at epoch 32
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.370084762573242 seconds
Loss: 0.7631
Train Accuracy: 72.96%
Test Accuracy: 72.78%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.604207992553711 seconds
LR changed during epoch: 5.55e-05 -> 1.11e-04
total runtime to train this model was 26.552713871002197 seconds
Hyperparameteres for model 4 at epoch 32
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1321358680725098 seconds
Loss: 0.6400
Train Accuracy: 77.20%
Test Accuracy: 75.38%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 32 Summary:

=====

Time: 156.85s (Avg member: 31.37s)
Population Mean Accuracy: 73.41%
Best Member Accuracy: 75.38%
Mean Batch Size: 256
Mean Learning Rate: 3.51e-04
Mean Weight Decay: 0.111

=====

Epoch 33/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.6799120903015137 seconds
LR changed during epoch: 1.84e-04 -> 1.82e-04
total runtime to train this model was 26.90407681465149 seconds
Hyperparameteres for model 0 at epoch 33
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386
drop_path: 0.3009444390241068
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3692805767059326 seconds
Loss: 0.7265
Train Accuracy: 74.28%
Test Accuracy: 73.03%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5687921047210693 seconds
LR changed during epoch: 5.08e-04 -> 5.07e-04
total runtime to train this model was 26.608352661132812 seconds
Hyperparameteres for model 1 at epoch 33
lr: 0.000509188071667745

weight_decay: 0.15
drop_path: 0.18655812482800194
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.531954288482666 seconds
Loss: 0.7954
Train Accuracy: 71.88%
Test Accuracy: 72.04%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6021888256072998 seconds
LR changed during epoch: 2.94e-04 -> 2.83e-04
total runtime to train this model was 27.125237941741943 seconds
Hyperparameteres for model 2 at epoch 33
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271
drop_path: 0.21704259365986278
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.557136058807373 seconds

Loss: 0.6800
Train Accuracy: 76.03%
Test Accuracy: 74.32%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7287063598632812 seconds
LR changed during epoch: 2.00e-04 -> 1.92e-04
total runtime to train this model was 25.861786365509033 seconds
Hyperparameters for model 3 at epoch 33
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257
drop_path: 0.20632463667325823
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3387632369995117 seconds
Loss: 0.7571
Train Accuracy: 73.11%
Test Accuracy: 72.60%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5839037895202637 seconds
LR changed during epoch: 1.11e-04 -> 1.66e-04
total runtime to train this model was 26.87324571609497 seconds
Hyperparameters for model 4 at epoch 33
lr: 0.0002758766418360161

weight_decay: 0.15
drop_path: 0.3260486304554311
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.388592004776001 seconds
Loss: 0.6379
Train Accuracy: 77.55%
Test Accuracy: 75.71%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 33 Summary:

=====

Time: 156.06s (Avg member: 31.21s)
Population Mean Accuracy: 73.54%
Best Member Accuracy: 75.71%
Mean Batch Size: 256
Mean Learning Rate: 3.51e-04
Mean Weight Decay: 0.111

```
=====
Epoch 34/70
=====
```

```
--- Training Member 0 (Batch size: 256) ---
built data in 1.6157348155975342 seconds
LR changed during epoch: 1.82e-04 -> 1.81e-04
total runtime to train this model was 26.457833528518677 seconds
Hyperparameteres for model 0 at epoch 34
lr: 0.00018945798503857986
```

```
weight_decay: 0.10256541999051386
```

```
drop_path: 0.3009444390241068
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.358459949493408 seconds
```

```
Loss: 0.7151
Train Accuracy: 74.64%
Test Accuracy: 74.14%
```

```
Google Drive already mounted.
```

```
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt
```

```
--- Training Member 1 (Batch size: 256) ---
```

```
built data in 1.5850601196289062 seconds
LR changed during epoch: 5.07e-04 -> 5.04e-04
total runtime to train this model was 26.437520742416382 seconds
Hyperparameteres for model 1 at epoch 34
lr: 0.000509188071667745
```

```
weight_decay: 0.15
```

```
drop_path: 0.18655812482800194
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.7866291999816895 seconds
```

```
Loss: 0.7796
Train Accuracy: 72.37%
Test Accuracy: 72.59%
```

```
Google Drive already mounted.
```

```
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt
```

```
--- Training Member 2 (Batch size: 256) ---
```

```
built data in 1.7268078327178955 seconds
LR changed during epoch: 2.83e-04 -> 2.72e-04
total runtime to train this model was 26.629207134246826 seconds
Hyperparameteres for model 2 at epoch 34
lr: 0.00046580972075259094
```

```
weight_decay: 0.04163760518412271
```

```
drop_path: 0.21704259365986278
```

```
warmup_epochs: 5
```

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5507445335388184 seconds

Loss: 0.6657

Train Accuracy: 76.18%

Test Accuracy: 74.66%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.576233148574829 seconds

LR changed during epoch: 1.92e-04 -> 1.85e-04

total runtime to train this model was 27.7064790725708 seconds

Hyperparameteres for model 3 at epoch 34

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4288671016693115 seconds

Loss: 0.7361

Train Accuracy: 73.82%

Test Accuracy: 72.70%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6563210487365723 seconds

LR changed during epoch: 1.66e-04 -> 2.21e-04

total runtime to train this model was 27.844462394714355 seconds

Hyperparameteres for model 4 at epoch 34

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8213181495666504 seconds

Loss: 0.6507

Train Accuracy: 76.92%

Test Accuracy: 75.40%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 34 Summary:

=====

Time: 157.56s (Avg member: 31.51s)

Population Mean Accuracy: 73.90%

Best Member Accuracy: 75.40%

Mean Batch Size: 256

Mean Learning Rate: 3.51e-04

Mean Weight Decay: 0.111

=====

Epoch 35/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.7433180809020996 seconds

LR changed during epoch: 1.81e-04 -> 1.79e-04

total runtime to train this model was 28.35099959373474 seconds

Hyperparameteres for model 0 at epoch 35

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.509183168411255 seconds

Loss: 0.7069

Train Accuracy: 75.16%

Test Accuracy: 74.67%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6301801204681396 seconds

LR changed during epoch: 5.04e-04 -> 5.02e-04

total runtime to train this model was 27.801206827163696 seconds

Hyperparameteres for model 1 at epoch 35

lr: 0.000509188071667745

weight_decay: 0.15

drop_path: 0.18655812482800194

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.449366807937622 seconds

Loss: 0.7660

Train Accuracy: 72.90%

Test Accuracy: 72.34%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.645524501800537 seconds

LR changed during epoch: 2.72e-04 -> 2.61e-04

total runtime to train this model was 27.700912475585938 seconds

Hyperparameteres for model 2 at epoch 35

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5210459232330322 seconds

Loss: 0.6437

Train Accuracy: 77.26%

Test Accuracy: 75.33%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7353177070617676 seconds

LR changed during epoch: 1.85e-04 -> 1.77e-04

total runtime to train this model was 27.152508020401 seconds

Hyperparameteres for model 3 at epoch 35

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4319355487823486 seconds

Loss: 0.7235

Train Accuracy: 74.25%

Test Accuracy: 73.87%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6033363342285156 seconds

LR changed during epoch: 2.21e-04 -> 2.76e-04

total runtime to train this model was 27.168487548828125 seconds

Hyperparameteres for model 4 at epoch 35

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4389283657073975 seconds

Loss: 0.6600

Train Accuracy: 76.57%

Test Accuracy: 74.31%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 35) ---

==== PBT Exploit & Explore ====

Top performers: [75.33]

Bottom performers: [72.34]

Member 1: lr changed from 0.000509188071667745 to 0.0005691103507825824

Member 1: drop_path changed from 0.18655812482800194 to 0.19751631103544445

Member 1 copied from 2

LR=5.69e-04, WD=0.150, DropPath=0.198, Warmup=5 epochs, Batch=256

=====

Epoch 35 Summary:

=====

Time: 161.18s (Avg member: 32.23s)

Population Mean Accuracy: 74.10%

Best Member Accuracy: 75.33%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.111

=====

Epoch 36/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.60642409324646 seconds

LR changed during epoch: 1.79e-04 -> 1.76e-04

total runtime to train this model was 27.22573232650757 seconds

Hyperparameteres for model 0 at epoch 36

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.1191022396087646 seconds

Loss: 0.6959

Train Accuracy: 75.28%

Test Accuracy: 73.81%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.734058141708374 seconds

LR changed during epoch: 5.81e-07 -> 1.14e-04

total runtime to train this model was 27.286296844482422 seconds

Hyperparameteres for model 1 at epoch 36

lr: 0.0005691103507825824

weight_decay: 0.15

drop_path: 0.19751631103544445

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.401611566543579 seconds

Loss: 0.5919

Train Accuracy: 79.17%

Test Accuracy: 76.89%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6251046657562256 seconds

LR changed during epoch: 2.61e-04 -> 2.50e-04

total runtime to train this model was 27.059360027313232 seconds

Hyperparameteres for model 2 at epoch 36

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4109182357788086 seconds

Loss: 0.6291

Train Accuracy: 77.72%

Test Accuracy: 75.17%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5996670722961426 seconds

LR changed during epoch: 1.77e-04 -> 1.70e-04

total runtime to train this model was 27.04060935974121 seconds

Hyperparameteres for model 3 at epoch 36

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4020800590515137 seconds

Loss: 0.7101

Train Accuracy: 74.92%

Test Accuracy: 73.29%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.778071403503418 seconds

LR changed during epoch: 2.76e-04 -> 2.76e-04

total runtime to train this model was 26.110188961029053 seconds

Hyperparameteres for model 4 at epoch 36

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.472534418106079 seconds

Loss: 0.6750

Train Accuracy: 76.23%

Test Accuracy: 74.53%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 36 Summary:

=====

Time: 158.12s (Avg member: 31.62s)

Population Mean Accuracy: 74.74%

Best Member Accuracy: 76.89%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.111

=====

Epoch 37/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5928890705108643 seconds

LR changed during epoch: 1.76e-04 -> 1.74e-04

total runtime to train this model was 27.259040355682373 seconds

Hyperparameteres for model 0 at epoch 37

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3822877407073975 seconds

Loss: 0.6816

Train Accuracy: 75.89%

Test Accuracy: 73.77%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.62473464012146 seconds

LR changed during epoch: 1.14e-04 -> 2.28e-04

total runtime to train this model was 26.240017652511597 seconds

Hyperparameteres for model 1 at epoch 37

lr: 0.0005691103507825824

weight_decay: 0.15

drop_path: 0.19751631103544445

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3760318756103516 seconds

Loss: 0.5985

Train Accuracy: 78.78%

Test Accuracy: 76.10%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.584850549697876 seconds

LR changed during epoch: 2.50e-04 -> 2.39e-04

total runtime to train this model was 26.30036997795105 seconds

Hyperparameteres for model 2 at epoch 37

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8221054077148438 seconds

Loss: 0.6160

Train Accuracy: 78.27%

Test Accuracy: 76.10%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7446188926696777 seconds

LR changed during epoch: 1.70e-04 -> 1.62e-04

total runtime to train this model was 25.901716947555542 seconds

Hyperparameteres for model 3 at epoch 37

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8009824752807617 seconds

Loss: 0.6937

Train Accuracy: 75.48%

Test Accuracy: 74.12%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5775225162506104 seconds

LR changed during epoch: 2.76e-04 -> 2.75e-04

total runtime to train this model was 26.698800325393677 seconds

Hyperparameteres for model 4 at epoch 37

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.393996238708496 seconds

Loss: 0.6587

Train Accuracy: 76.68%

Test Accuracy: 74.18%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 37 Summary:

=====

Time: 154.55s (Avg member: 30.91s)

Population Mean Accuracy: 74.85%

Best Member Accuracy: 76.10%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.111

=====

Epoch 38/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5867841243743896 seconds

LR changed during epoch: 1.74e-04 -> 1.71e-04

total runtime to train this model was 26.719101428985596 seconds

Hyperparameteres for model 0 at epoch 38

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.468393325805664 seconds

Loss: 0.6794

Train Accuracy: 76.02%

Test Accuracy: 74.97%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.7121400833129883 seconds

LR changed during epoch: 2.28e-04 -> 3.42e-04

total runtime to train this model was 26.27090072631836 seconds

Hyperparameteres for model 1 at epoch 38

lr: 0.0005691103507825824

weight_decay: 0.15

drop_path: 0.19751631103544445

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.640101432800293 seconds

Loss: 0.6407

Train Accuracy: 77.25%

Test Accuracy: 75.03%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5863804817199707 seconds

LR changed during epoch: 2.39e-04 -> 2.28e-04

total runtime to train this model was 26.608665466308594 seconds

Hyperparameteres for model 2 at epoch 38

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.362978458404541 seconds

Loss: 0.5917

Train Accuracy: 78.96%

Test Accuracy: 76.08%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5893101692199707 seconds

LR changed during epoch: 1.62e-04 -> 1.54e-04

total runtime to train this model was 26.39499568939209 seconds

Hyperparameteres for model 3 at epoch 38

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3625354766845703 seconds

Loss: 0.6866

Train Accuracy: 75.56%

Test Accuracy: 74.96%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5913019180297852 seconds

LR changed during epoch: 2.75e-04 -> 2.74e-04

total runtime to train this model was 26.55180335044861 seconds

Hyperparameteres for model 4 at epoch 38

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5097739696502686 seconds

Loss: 0.6499

Train Accuracy: 76.86%

Test Accuracy: 75.57%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 38 Summary:

=====

Time: 155.18s (Avg member: 31.04s)

Population Mean Accuracy: 75.32%

Best Member Accuracy: 76.08%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.111

=====

Epoch 39/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.7819478511810303 seconds

LR changed during epoch: 1.71e-04 -> 1.69e-04

total runtime to train this model was 26.076609134674072 seconds

Hyperparameteres for model 0 at epoch 39

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.2040865421295166 seconds

Loss: 0.6643

Train Accuracy: 76.32%

Test Accuracy: 74.80%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5902767181396484 seconds
LR changed during epoch: 3.42e-04 -> 4.56e-04
total runtime to train this model was 26.898056983947754 seconds
Hyperparameteres for model 1 at epoch 39
lr: 0.0005691103507825824

weight_decay: 0.15
drop_path: 0.19751631103544445
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6640729904174805 seconds
Loss: 0.6771
Train Accuracy: 76.01%
Test Accuracy: 73.44%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.584528923034668 seconds
LR changed during epoch: 2.28e-04 -> 2.17e-04
total runtime to train this model was 26.901459455490112 seconds
Hyperparameteres for model 2 at epoch 39
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271
drop_path: 0.21704259365986278
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6824722290039062 seconds
Loss: 0.5778
Train Accuracy: 79.50%
Test Accuracy: 76.87%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6112089157104492 seconds
LR changed during epoch: 1.54e-04 -> 1.47e-04
total runtime to train this model was 26.191531896591187 seconds
Hyperparameteres for model 3 at epoch 39
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257
drop_path: 0.20632463667325823
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.833958625793457 seconds

Loss: 0.6698

Train Accuracy: 76.28%

Test Accuracy: 74.32%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5889883041381836 seconds

LR changed during epoch: 2.74e-04 -> 2.73e-04

total runtime to train this model was 26.892503261566162 seconds

Hyperparameteres for model 4 at epoch 39

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.7389333248138428 seconds

Loss: 0.6404

Train Accuracy: 77.21%

Test Accuracy: 75.29%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 39 Summary:

=====

Time: 157.49s (Avg member: 31.50s)

Population Mean Accuracy: 74.94%

Best Member Accuracy: 76.87%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.111

=====

Epoch 40/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5931830406188965 seconds

LR changed during epoch: 1.69e-04 -> 1.66e-04

total runtime to train this model was 27.32192850112915 seconds

Hyperparameteres for model 0 at epoch 40

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.371846914291382 seconds

Loss: 0.6549

Train Accuracy: 76.88%
Test Accuracy: 75.33%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6366279125213623 seconds
LR changed during epoch: 4.56e-04 -> 5.69e-04
total runtime to train this model was 26.768596410751343 seconds
Hyperparameteres for model 1 at epoch 40
lr: 0.0005691103507825824

weight_decay: 0.15

drop_path: 0.19751631103544445

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0762078762054443 seconds
Loss: 0.7209
Train Accuracy: 74.41%
Test Accuracy: 74.10%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.722146987915039 seconds
LR changed during epoch: 2.17e-04 -> 2.05e-04
total runtime to train this model was 26.691677808761597 seconds
Hyperparameteres for model 2 at epoch 40
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3897483348846436 seconds
Loss: 0.5694
Train Accuracy: 79.74%
Test Accuracy: 76.51%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5827558040618896 seconds
LR changed during epoch: 1.47e-04 -> 1.39e-04
total runtime to train this model was 27.166378498077393 seconds
Hyperparameteres for model 3 at epoch 40
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4228386878967285 seconds

Loss: 0.6608

Train Accuracy: 76.46%

Test Accuracy: 74.90%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6013364791870117 seconds

LR changed during epoch: 2.73e-04 -> 2.72e-04

total runtime to train this model was 27.15117835998535 seconds

Hyperparameteres for model 4 at epoch 40

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.364124298095703 seconds

Loss: 0.6382

Train Accuracy: 77.21%

Test Accuracy: 75.55%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 40) ---

==== PBT Exploit & Explore ===

Top performers: [76.51]

Bottom performers: [74.1]

Member 1: lr changed from 0.0005691103507825824 to 0.0008607256702984102

Member 1: drop_path changed from 0.19751631103544445 to 0.2619549434516041

Member 1 copied from 2

LR=8.61e-04, WD=0.150, DropPath=0.262, Warmup=5 epochs, Batch=256

=====

Epoch 40 Summary:

=====

Time: 157.17s (Avg member: 31.43s)

Population Mean Accuracy: 75.28%

Best Member Accuracy: 76.51%

Mean Batch Size: 256

Mean Learning Rate: 4.21e-04

Mean Weight Decay: 0.111

=====

Epoch 41/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.7688775062561035 seconds

LR changed during epoch: 1.66e-04 -> 1.63e-04

total runtime to train this model was 26.50205898284912 seconds

Hyperparameteres for model 0 at epoch 41

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.397235155105591 seconds

Loss: 0.6500

Train Accuracy: 77.01%

Test Accuracy: 75.66%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6127665042877197 seconds

LR changed during epoch: 8.78e-07 -> 1.73e-04

total runtime to train this model was 26.968808889389038 seconds

Hyperparameteres for model 1 at epoch 41

lr: 0.0008607256702984102

weight_decay: 0.15

drop_path: 0.2619549434516041

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5492238998413086 seconds

Loss: 0.5367

Train Accuracy: 80.85%

Test Accuracy: 77.24%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6113018989562988 seconds

LR changed during epoch: 2.05e-04 -> 1.94e-04

total runtime to train this model was 26.772679328918457 seconds

Hyperparameteres for model 2 at epoch 41

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.524662494659424 seconds

Loss: 0.5585

Train Accuracy: 79.99%

Test Accuracy: 77.26%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6390244960784912 seconds
LR changed during epoch: 1.39e-04 -> 1.32e-04
total runtime to train this model was 26.928735971450806 seconds
Hyperparameteres for model 3 at epoch 41
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5537147521972656 seconds
Loss: 0.6468
Train Accuracy: 77.11%
Test Accuracy: 74.84%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6043827533721924 seconds
LR changed during epoch: 2.72e-04 -> 2.70e-04
total runtime to train this model was 26.47174596786499 seconds
Hyperparameteres for model 4 at epoch 41
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.413653612136841 seconds
Loss: 0.6195
Train Accuracy: 78.03%
Test Accuracy: 74.90%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 41 Summary:

=====

Time: 157.59s (Avg member: 31.52s)
Population Mean Accuracy: 75.98%
Best Member Accuracy: 77.26%
Mean Batch Size: 256
Mean Learning Rate: 4.21e-04
Mean Weight Decay: 0.111

=====

Epoch 42/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.6012892723083496 seconds

LR changed during epoch: 1.63e-04 -> 1.59e-04

total runtime to train this model was 26.639225006103516 seconds

Hyperparameteres for model 0 at epoch 42

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.420015335083008 seconds

Loss: 0.6369

Train Accuracy: 77.47%

Test Accuracy: 75.80%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5875673294067383 seconds

LR changed during epoch: 1.73e-04 -> 3.45e-04

total runtime to train this model was 26.924933195114136 seconds

Hyperparameteres for model 1 at epoch 42

lr: 0.0008607256702984102

weight_decay: 0.15

drop_path: 0.2619549434516041

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5576891899108887 seconds

Loss: 0.5748

Train Accuracy: 79.58%

Test Accuracy: 75.91%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.763458013534546 seconds

LR changed during epoch: 1.94e-04 -> 1.83e-04

total runtime to train this model was 27.604387760162354 seconds

Hyperparameteres for model 2 at epoch 42

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7314586639404297 seconds

Loss: 0.5351
Train Accuracy: 80.85%
Test Accuracy: 77.93%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.610565423965454 seconds
LR changed during epoch: 1.32e-04 -> 1.24e-04
total runtime to train this model was 27.748905897140503 seconds
Hyperparameteres for model 3 at epoch 42
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.508260726928711 seconds

Loss: 0.6352
Train Accuracy: 77.45%
Test Accuracy: 75.41%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6704506874084473 seconds
LR changed during epoch: 2.70e-04 -> 2.68e-04
total runtime to train this model was 27.83782458305359 seconds
Hyperparameteres for model 4 at epoch 42
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7647745609283447 seconds

Loss: 0.6128
Train Accuracy: 78.24%
Test Accuracy: 75.74%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 42 Summary:

=====

Time: 159.27s (Avg member: 31.85s)
Population Mean Accuracy: 76.16%
Best Member Accuracy: 77.93%
Mean Batch Size: 256

Mean Learning Rate: 4.21e-04
Mean Weight Decay: 0.111

=====
Epoch 43/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.735668420791626 seconds
LR changed during epoch: 1.59e-04 -> 1.56e-04
total runtime to train this model was 28.636403560638428 seconds
Hyperparameteres for model 0 at epoch 43
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.530980110168457 seconds
Loss: 0.6269
Train Accuracy: 77.96%
Test Accuracy: 75.44%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6962952613830566 seconds
LR changed during epoch: 3.45e-04 -> 5.17e-04
total runtime to train this model was 28.692702293395996 seconds
Hyperparameteres for model 1 at epoch 43
lr: 0.0008607256702984102

weight_decay: 0.15

drop_path: 0.2619549434516041

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.455533504486084 seconds
Loss: 0.6469
Train Accuracy: 76.93%
Test Accuracy: 74.26%
Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6650161743164062 seconds
LR changed during epoch: 1.83e-04 -> 1.72e-04
total runtime to train this model was 27.976374864578247 seconds
Hyperparameteres for model 2 at epoch 43
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4182686805725098 seconds

Loss: 0.5213

Train Accuracy: 81.50%

Test Accuracy: 77.77%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.6020286083221436 seconds

LR changed during epoch: 1.24e-04 -> 1.17e-04

total runtime to train this model was 27.817365646362305 seconds

Hyperparameteres for model 3 at epoch 43

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.437485933303833 seconds

Loss: 0.6227

Train Accuracy: 77.83%

Test Accuracy: 75.76%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6604652404785156 seconds

LR changed during epoch: 2.68e-04 -> 2.66e-04

total runtime to train this model was 28.315586805343628 seconds

Hyperparameteres for model 4 at epoch 43

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5260956287384033 seconds

Loss: 0.6061

Train Accuracy: 78.47%

Test Accuracy: 76.16%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 43 Summary:

```
=====
Time: 164.45s (Avg member: 32.89s)
Population Mean Accuracy: 75.88%
Best Member Accuracy: 77.77%
Mean Batch Size: 256
Mean Learning Rate: 4.21e-04
Mean Weight Decay: 0.111
```

```
=====
Epoch 44/70
=====
```

```
--- Training Member 0 (Batch size: 256) ---
built data in 1.751971960067749 seconds
LR changed during epoch: 1.56e-04 -> 1.52e-04
total runtime to train this model was 27.846311330795288 seconds
Hyperparameteres for model 0 at epoch 44
lr: 0.00018945798503857986
```

```
weight_decay: 0.10256541999051386
```

```
drop_path: 0.3009444390241068
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.9864799976348877 seconds
```

```
Loss: 0.6167
Train Accuracy: 78.03%
Test Accuracy: 76.22%
```

```
Google Drive already mounted.
```

```
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt
```

```
--- Training Member 1 (Batch size: 256) ---
```

```
built data in 1.6902036666870117 seconds
LR changed during epoch: 5.17e-04 -> 6.89e-04
total runtime to train this model was 27.428284406661987 seconds
Hyperparameteres for model 1 at epoch 44
lr: 0.0008607256702984102
```

```
weight_decay: 0.15
```

```
drop_path: 0.2619549434516041
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.4948842525482178 seconds
```

```
Loss: 0.7066
Train Accuracy: 74.79%
Test Accuracy: 73.67%
```

```
Google Drive already mounted.
```

```
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt
```

```
--- Training Member 2 (Batch size: 256) ---
```

```
built data in 1.6091196537017822 seconds
LR changed during epoch: 1.72e-04 -> 1.62e-04
total runtime to train this model was 27.16585874557495 seconds
```

Hyperparameteres for model 2 at epoch 44

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.510817050933838 seconds

Loss: 0.5030

Train Accuracy: 82.12%

Test Accuracy: 77.70%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7241089344024658 seconds

LR changed during epoch: 1.17e-04 -> 1.10e-04

total runtime to train this model was 27.085044145584106 seconds

Hyperparameteres for model 3 at epoch 44

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.304152727127075 seconds

Loss: 0.6092

Train Accuracy: 78.26%

Test Accuracy: 75.91%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.592719316482544 seconds

LR changed during epoch: 2.66e-04 -> 2.63e-04

total runtime to train this model was 27.17934775352478 seconds

Hyperparameteres for model 4 at epoch 44

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3902783393859863 seconds

Loss: 0.5934

Train Accuracy: 79.08%

Test Accuracy: 75.66%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 44 Summary:

=====

Time: 159.96s (Avg member: 31.99s)

Population Mean Accuracy: 75.83%

Best Member Accuracy: 77.70%

Mean Batch Size: 256

Mean Learning Rate: 4.21e-04

Mean Weight Decay: 0.111

=====

Epoch 45/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.587341547012329 seconds

LR changed during epoch: 1.52e-04 -> 1.49e-04

total runtime to train this model was 27.511737823486328 seconds

Hyperparameteres for model 0 at epoch 45

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.495717763900757 seconds

Loss: 0.6129

Train Accuracy: 78.31%

Test Accuracy: 76.29%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6928114891052246 seconds

LR changed during epoch: 6.89e-04 -> 8.61e-04

total runtime to train this model was 28.106132984161377 seconds

Hyperparameteres for model 1 at epoch 45

lr: 0.0008607256702984102

weight_decay: 0.15

drop_path: 0.2619549434516041

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.380207061767578 seconds

Loss: 0.7545

Train Accuracy: 73.12%

Test Accuracy: 71.13%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6344830989837646 seconds
LR changed during epoch: 1.62e-04 -> 1.51e-04
total runtime to train this model was 27.843255043029785 seconds
Hyperparameteres for model 2 at epoch 45
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4697136878967285 seconds
Loss: 0.4885
Train Accuracy: 82.69%
Test Accuracy: 77.65%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6173691749572754 seconds
LR changed during epoch: 1.10e-04 -> 1.02e-04
total runtime to train this model was 28.19821786880493 seconds
Hyperparameteres for model 3 at epoch 45
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5080952644348145 seconds
Loss: 0.5988
Train Accuracy: 78.85%
Test Accuracy: 76.40%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.809051752090454 seconds
LR changed during epoch: 2.63e-04 -> 2.60e-04
total runtime to train this model was 28.187843799591064 seconds
Hyperparameteres for model 4 at epoch 45
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.9530889987945557 seconds

Loss: 0.5828
Train Accuracy: 79.34%
Test Accuracy: 76.85%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 45) ---

==== PBT Exploit & Explore ====

Top performers: [77.65]

Bottom performers: [71.13]

Member 1: lr changed from 0.0008607256702984102 to 0.0005805270483559148

Member 1: drop_path changed from 0.2619549434516041 to 0.1673247045550434

Member 1 copied from 2

LR=5.81e-04, WD=0.150, DropPath=0.167, Warmup=5 epochs, Batch=256

=====
Epoch 45 Summary:
=====

Time: 163.22s (Avg member: 32.64s)

Population Mean Accuracy: 75.66%

Best Member Accuracy: 77.65%

Mean Batch Size: 256

Mean Learning Rate: 3.65e-04

Mean Weight Decay: 0.111

=====
Epoch 46/70
=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.6035771369934082 seconds

LR changed during epoch: 1.49e-04 -> 1.45e-04

total runtime to train this model was 27.56298279762268 seconds

Hyperparameteres for model 0 at epoch 46

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4931161403656006 seconds

Loss: 0.6050
Train Accuracy: 78.46%
Test Accuracy: 76.53%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6452820301055908 seconds

LR changed during epoch: 5.92e-07 -> 1.17e-04

total runtime to train this model was 27.36886429786682 seconds

Hyperparameteres for model 1 at epoch 46

lr: 0.0005805270483559148

```
weight_decay: 0.15
drop_path: 0.1673247045550434
warmup_epochs: 5
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.4305648803710938 seconds
Loss: 0.4746
Train Accuracy: 83.12%
Test Accuracy: 78.51%
Google Drive already mounted.
```

```
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt
```

```
--- Training Member 2 (Batch size: 256) ---
built data in 1.7830262184143066 seconds
LR changed during epoch: 1.51e-04 -> 1.41e-04
total runtime to train this model was 27.42859935760498 seconds
Hyperparameteres for model 2 at epoch 46
lr: 0.00046580972075259094
```

```
weight_decay: 0.04163760518412271
drop_path: 0.21704259365986278
warmup_epochs: 5
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.7652266025543213 seconds
Loss: 0.4816
Train Accuracy: 82.89%
Test Accuracy: 78.29%
Google Drive already mounted.
```

```
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt
```

```
--- Training Member 3 (Batch size: 256) ---
built data in 1.624793529510498 seconds
LR changed during epoch: 1.02e-04 -> 9.54e-05
total runtime to train this model was 27.292415380477905 seconds
Hyperparameteres for model 3 at epoch 46
lr: 0.0003155456675032866
```

```
weight_decay: 0.10835600837460257
drop_path: 0.20632463667325823
warmup_epochs: 5
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.5219080448150635 seconds
Loss: 0.5873
Train Accuracy: 79.20%
Test Accuracy: 76.11%
Google Drive already mounted.
```

```
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt
```

--- Training Member 4 (Batch size: 256) ---
built data in 1.6195900440216064 seconds
LR changed during epoch: 2.60e-04 -> 2.57e-04
total runtime to train this model was 27.627898454666138 seconds
Hyperparameteres for model 4 at epoch 46
lr: 0.0002758766418360161

weight_decay: 0.15
drop_path: 0.3260486304554311
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.549558639526367 seconds
Loss: 0.5769
Train Accuracy: 79.48%
Test Accuracy: 76.02%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====
Epoch 46 Summary:
=====

Time: 159.58s (Avg member: 31.92s)
Population Mean Accuracy: 77.09%
Best Member Accuracy: 78.51%
Mean Batch Size: 256
Mean Learning Rate: 3.65e-04
Mean Weight Decay: 0.111

=====
Epoch 47/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.7645797729492188 seconds
LR changed during epoch: 1.45e-04 -> 1.41e-04
total runtime to train this model was 26.899643421173096 seconds
Hyperparameteres for model 0 at epoch 47
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386
drop_path: 0.3009444390241068
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.029553174972534 seconds
Loss: 0.5885
Train Accuracy: 79.22%
Test Accuracy: 76.66%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.590339183807373 seconds

LR changed during epoch: 1.17e-04 -> 2.33e-04
total runtime to train this model was 26.91105580329895 seconds
Hyperparameteres for model 1 at epoch 47
lr: 0.0005805270483559148

weight_decay: 0.15

drop_path: 0.1673247045550434

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.415520668029785 seconds

Loss: 0.4964
Train Accuracy: 82.09%
Test Accuracy: 77.39%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5937151908874512 seconds
LR changed during epoch: 1.41e-04 -> 1.30e-04
total runtime to train this model was 26.67844033241272 seconds
Hyperparameteres for model 2 at epoch 47
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3435654640197754 seconds
Loss: 0.4617
Train Accuracy: 83.58%
Test Accuracy: 78.11%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.649930715560913 seconds
LR changed during epoch: 9.54e-05 -> 8.85e-05
total runtime to train this model was 26.23061990737915 seconds
Hyperparameteres for model 3 at epoch 47
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3123650550842285 seconds
Loss: 0.5791

Train Accuracy: 79.43%
Test Accuracy: 76.59%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6655349731445312 seconds
LR changed during epoch: 2.57e-04 -> 2.53e-04
total runtime to train this model was 27.137404918670654 seconds
Hyperparameteres for model 4 at epoch 47
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3793294429779053 seconds
Loss: 0.5685
Train Accuracy: 79.83%
Test Accuracy: 76.94%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 47 Summary:

=====

Time: 156.87s (Avg member: 31.37s)
Population Mean Accuracy: 77.14%
Best Member Accuracy: 78.11%
Mean Batch Size: 256
Mean Learning Rate: 3.65e-04
Mean Weight Decay: 0.111

=====

Epoch 48/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6174778938293457 seconds
LR changed during epoch: 1.41e-04 -> 1.37e-04
total runtime to train this model was 27.119179487228394 seconds
Hyperparameteres for model 0 at epoch 48
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.415696859359741 seconds
Loss: 0.5833
Train Accuracy: 79.35%
Test Accuracy: 76.60%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6420297622680664 seconds

LR changed during epoch: 2.33e-04 -> 3.49e-04

total runtime to train this model was 27.843024253845215 seconds

Hyperparameteres for model 1 at epoch 48

lr: 0.0005805270483559148

weight_decay: 0.15

drop_path: 0.1673247045550434

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.2344963550567627 seconds

Loss: 0.5425

Train Accuracy: 80.82%

Test Accuracy: 75.94%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.755021572113037 seconds

LR changed during epoch: 1.30e-04 -> 1.20e-04

total runtime to train this model was 28.1777822971344 seconds

Hyperparameteres for model 2 at epoch 48

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.455528736114502 seconds

Loss: 0.4512

Train Accuracy: 83.99%

Test Accuracy: 78.45%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.6162664890289307 seconds

LR changed during epoch: 8.85e-05 -> 8.18e-05

total runtime to train this model was 27.64628767967224 seconds

Hyperparameteres for model 3 at epoch 48

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.356043577194214 seconds

Loss: 0.5673

Train Accuracy: 79.89%

Test Accuracy: 76.91%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.598992109298706 seconds

LR changed during epoch: 2.53e-04 -> 2.50e-04

total runtime to train this model was 26.981650590896606 seconds

Hyperparameteres for model 4 at epoch 48

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.914935350418091 seconds

Loss: 0.5576

Train Accuracy: 80.40%

Test Accuracy: 76.55%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 48 Summary:

=====

Time: 160.68s (Avg member: 32.14s)

Population Mean Accuracy: 76.89%

Best Member Accuracy: 78.45%

Mean Batch Size: 256

Mean Learning Rate: 3.65e-04

Mean Weight Decay: 0.111

=====

Epoch 49/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.7196357250213623 seconds

LR changed during epoch: 1.37e-04 -> 1.33e-04

total runtime to train this model was 26.755329608917236 seconds

Hyperparameteres for model 0 at epoch 49

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4646542072296143 seconds

Loss: 0.5730
Train Accuracy: 79.78%

Test Accuracy: 76.97%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6284029483795166 seconds
LR changed during epoch: 3.49e-04 -> 4.65e-04
total runtime to train this model was 27.016754388809204 seconds
Hyperparameteres for model 1 at epoch 49
lr: 0.0005805270483559148

weight_decay: 0.15

drop_path: 0.1673247045550434

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3880975246429443 seconds

Loss: 0.5997
Train Accuracy: 78.86%
Test Accuracy: 75.23%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5802528858184814 seconds
LR changed during epoch: 1.20e-04 -> 1.11e-04
total runtime to train this model was 26.787689924240112 seconds
Hyperparameteres for model 2 at epoch 49
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.35931396484375 seconds

Loss: 0.4359
Train Accuracy: 84.40%
Test Accuracy: 78.24%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7516016960144043 seconds
LR changed during epoch: 8.18e-05 -> 7.53e-05
total runtime to train this model was 26.839113235473633 seconds
Hyperparameteres for model 3 at epoch 49
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.322049856185913 seconds

Loss: 0.5557

Train Accuracy: 80.33%

Test Accuracy: 77.63%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6198296546936035 seconds

LR changed during epoch: 2.50e-04 -> 2.46e-04

total runtime to train this model was 27.54920721054077 seconds

Hyperparameteres for model 4 at epoch 49

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4759349822998047 seconds

Loss: 0.5449

Train Accuracy: 80.63%

Test Accuracy: 76.57%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 49 Summary:

=====

Time: 157.44s (Avg member: 31.49s)

Population Mean Accuracy: 76.93%

Best Member Accuracy: 78.24%

Mean Batch Size: 256

Mean Learning Rate: 3.65e-04

Mean Weight Decay: 0.111

=====

Epoch 50/70

--- Training Member 0 (Batch size: 256) ---

built data in 1.6115808486938477 seconds

LR changed during epoch: 1.33e-04 -> 1.29e-04

total runtime to train this model was 26.598231077194214 seconds

Hyperparameteres for model 0 at epoch 50

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.376189947128296 seconds

Loss: 0.5623

Train Accuracy: 79.85%

Test Accuracy: 77.00%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.7118399143218994 seconds

LR changed during epoch: 4.65e-04 -> 5.81e-04

total runtime to train this model was 27.034961223602295 seconds

Hyperparameteres for model 1 at epoch 50

lr: 0.0005805270483559148

weight_decay: 0.15

drop_path: 0.1673247045550434

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3002092838287354 seconds

Loss: 0.6468

Train Accuracy: 76.85%

Test Accuracy: 73.18%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.621570110321045 seconds

LR changed during epoch: 1.11e-04 -> 1.01e-04

total runtime to train this model was 27.06436800956726 seconds

Hyperparameteres for model 2 at epoch 50

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.472062587738037 seconds

Loss: 0.4231

Train Accuracy: 84.87%

Test Accuracy: 79.09%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.611109972000122 seconds

LR changed during epoch: 7.53e-05 -> 6.89e-05

total runtime to train this model was 27.77530312538147 seconds

Hyperparameteres for model 3 at epoch 50

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4617412090301514 seconds

Loss: 0.5482

Train Accuracy: 80.57%

Test Accuracy: 77.49%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.656193494796753 seconds

LR changed during epoch: 2.46e-04 -> 2.41e-04

total runtime to train this model was 27.18355083465576 seconds

Hyperparameteres for model 4 at epoch 50

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.531139373779297 seconds

Loss: 0.5390

Train Accuracy: 80.74%

Test Accuracy: 77.01%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 50) ---

==== PBT Exploit & Explore ===

Top performers: [79.09]

Bottom performers: [73.18]

Member 1: lr changed from 0.0005805270483559148 to 0.0006760652163580131

Member 1: weight_decay changed from 0.15 to 0.14081027580272165

Member 1: drop_path changed from 0.1673247045550434 to 0.0751073183763318

Member 1 copied from 2

LR=6.76e-04, WD=0.141, DropPath=0.075, Warmup=5 epochs, Batch=256

=====

Epoch 50 Summary:

=====

Time: 159.25s (Avg member: 31.85s)

Population Mean Accuracy: 76.75%

Best Member Accuracy: 79.09%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.109

=====

Epoch 51/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.6054530143737793 seconds

LR changed during epoch: 1.29e-04 -> 1.24e-04

total runtime to train this model was 27.54365611076355 seconds

Hyperparameteres for model 0 at epoch 51

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4478015899658203 seconds

Loss: 0.5577

Train Accuracy: 80.10%

Test Accuracy: 77.21%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.613232135772705 seconds

LR changed during epoch: 6.90e-07 -> 1.36e-04

total runtime to train this model was 27.019661903381348 seconds

Hyperparameteres for model 1 at epoch 51

lr: 0.0006760652163580131

weight_decay: 0.14081027580272165

drop_path: 0.0751073183763318

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4894533157348633 seconds

Loss: 0.4192

Train Accuracy: 85.05%

Test Accuracy: 79.28%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6013104915618896 seconds

LR changed during epoch: 1.01e-04 -> 9.23e-05

total runtime to train this model was 27.511333465576172 seconds

Hyperparameteres for model 2 at epoch 51

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.516238212585449 seconds

Loss: 0.4105

Train Accuracy: 85.37%

Test Accuracy: 78.96%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.645993709564209 seconds

LR changed during epoch: 6.89e-05 -> 6.28e-05

total runtime to train this model was 27.799262762069702 seconds

Hyperparameteres for model 3 at epoch 51

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.510375499725342 seconds

Loss: 0.5363

Train Accuracy: 81.01%

Test Accuracy: 77.86%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6264550685882568 seconds

LR changed during epoch: 2.41e-04 -> 2.37e-04

total runtime to train this model was 27.794545888900757 seconds

Hyperparameteres for model 4 at epoch 51

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4505584239959717 seconds

Loss: 0.5257

Train Accuracy: 81.21%

Test Accuracy: 77.65%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====
Epoch 51 Summary:
=====

Time: 160.47s (Avg member: 32.09s)
Population Mean Accuracy: 78.19%
Best Member Accuracy: 79.28%
Mean Batch Size: 256
Mean Learning Rate: 3.85e-04
Mean Weight Decay: 0.109

=====
Epoch 52/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6703715324401855 seconds
LR changed during epoch: 1.24e-04 -> 1.20e-04
total runtime to train this model was 26.651844024658203 seconds
Hyperparameteres for model 0 at epoch 52
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4450137615203857 seconds
Loss: 0.5427
Train Accuracy: 80.61%
Test Accuracy: 77.36%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6606452465057373 seconds
LR changed during epoch: 1.36e-04 -> 2.71e-04
total runtime to train this model was 27.355595111846924 seconds
Hyperparameteres for model 1 at epoch 52
lr: 0.0006760652163580131

weight_decay: 0.14081027580272165

drop_path: 0.0751073183763318

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5035297870635986 seconds
Loss: 0.4735
Train Accuracy: 83.16%
Test Accuracy: 77.56%
Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5993757247924805 seconds
LR changed during epoch: 9.23e-05 -> 8.35e-05
total runtime to train this model was 26.94406270980835 seconds
Hyperparameteres for model 2 at epoch 52

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.418205976486206 seconds

Loss: 0.4011

Train Accuracy: 85.60%

Test Accuracy: 78.77%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5952882766723633 seconds

LR changed during epoch: 6.28e-05 -> 5.68e-05

total runtime to train this model was 27.077768564224243 seconds

Hyperparameteres for model 3 at epoch 52

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.660804271697998 seconds

Loss: 0.5333

Train Accuracy: 81.04%

Test Accuracy: 78.04%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.7587075233459473 seconds

LR changed during epoch: 2.37e-04 -> 2.32e-04

total runtime to train this model was 27.869291305541992 seconds

Hyperparameteres for model 4 at epoch 52

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6508169174194336 seconds

Loss: 0.5157

Train Accuracy: 81.73%

Test Accuracy: 77.13%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 52 Summary:

=====

Time: 159.15s (Avg member: 31.83s)

Population Mean Accuracy: 77.77%

Best Member Accuracy: 78.77%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.109

=====

Epoch 53/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.6277990341186523 seconds

LR changed during epoch: 1.20e-04 -> 1.16e-04

total runtime to train this model was 27.507988214492798 seconds

Hyperparameteres for model 0 at epoch 53

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3729186058044434 seconds

Loss: 0.5328

Train Accuracy: 81.09%

Test Accuracy: 77.36%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.607938528060913 seconds

LR changed during epoch: 2.71e-04 -> 4.06e-04

total runtime to train this model was 27.44011425971985 seconds

Hyperparameteres for model 1 at epoch 53

lr: 0.0006760652163580131

weight_decay: 0.14081027580272165

drop_path: 0.0751073183763318

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.78619384765625 seconds

Loss: 0.5429

Train Accuracy: 80.75%

Test Accuracy: 75.89%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7786791324615479 seconds
LR changed during epoch: 8.35e-05 -> 7.51e-05
total runtime to train this model was 27.275724172592163 seconds
Hyperparameteres for model 2 at epoch 53
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5279388427734375 seconds
Loss: 0.3857
Train Accuracy: 86.31%
Test Accuracy: 78.55%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6363048553466797 seconds
LR changed during epoch: 5.68e-05 -> 5.11e-05
total runtime to train this model was 27.120590448379517 seconds
Hyperparameteres for model 3 at epoch 53
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.374786853790283 seconds
Loss: 0.5149
Train Accuracy: 81.73%
Test Accuracy: 77.95%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5822322368621826 seconds
LR changed during epoch: 2.32e-04 -> 2.27e-04
total runtime to train this model was 26.89726948738098 seconds
Hyperparameteres for model 4 at epoch 53
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.360140323638916 seconds

Loss: 0.5126

Train Accuracy: 81.79%

Test Accuracy: 78.29%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 53 Summary:

=====

Time: 158.17s (Avg member: 31.63s)

Population Mean Accuracy: 77.61%

Best Member Accuracy: 78.55%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.109

=====

Epoch 54/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.73455810546875 seconds

LR changed during epoch: 1.16e-04 -> 1.11e-04

total runtime to train this model was 26.740745306015015 seconds

Hyperparameteres for model 0 at epoch 54

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.2065515518188477 seconds

Loss: 0.5220

Train Accuracy: 81.30%

Test Accuracy: 77.68%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6023356914520264 seconds

LR changed during epoch: 4.06e-04 -> 5.42e-04

total runtime to train this model was 27.129109859466553 seconds

Hyperparameteres for model 1 at epoch 54

lr: 0.0006760652163580131

weight_decay: 0.14081027580272165

drop_path: 0.0751073183763318

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4139671325683594 seconds

Loss: 0.6007

Train Accuracy: 78.50%
Test Accuracy: 74.94%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6364326477050781 seconds
LR changed during epoch: 7.51e-05 -> 6.71e-05
total runtime to train this model was 27.158846139907837 seconds
Hyperparameteres for model 2 at epoch 54
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.445749282836914 seconds
Loss: 0.3781
Train Accuracy: 86.46%
Test Accuracy: 79.22%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6383655071258545 seconds
LR changed during epoch: 5.11e-05 -> 4.57e-05
total runtime to train this model was 26.75484871864319 seconds
Hyperparameteres for model 3 at epoch 54
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.513831853866577 seconds
Loss: 0.5084
Train Accuracy: 81.89%
Test Accuracy: 77.91%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.644150733947754 seconds
LR changed during epoch: 2.27e-04 -> 2.22e-04
total runtime to train this model was 27.383374214172363 seconds
Hyperparameteres for model 4 at epoch 54
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4569151401519775 seconds

Loss: 0.5004

Train Accuracy: 82.29%

Test Accuracy: 78.27%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 54 Summary:

=====

Time: 158.72s (Avg member: 31.74s)

Population Mean Accuracy: 77.60%

Best Member Accuracy: 79.22%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.109

=====

Epoch 55/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.631295919418335 seconds

LR changed during epoch: 1.11e-04 -> 1.07e-04

total runtime to train this model was 27.072940349578857 seconds

Hyperparameteres for model 0 at epoch 55

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.389329671859741 seconds

Loss: 0.5225

Train Accuracy: 81.35%

Test Accuracy: 78.11%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.607429027557373 seconds

LR changed during epoch: 5.42e-04 -> 6.76e-04

total runtime to train this model was 27.5273220539093 seconds

Hyperparameteres for model 1 at epoch 55

lr: 0.0006760652163580131

weight_decay: 0.14081027580272165

drop_path: 0.0751073183763318

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.275698184967041 seconds

Loss: 0.6555

Train Accuracy: 76.53%

Test Accuracy: 74.58%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6900925636291504 seconds

LR changed during epoch: 6.71e-05 -> 5.94e-05

total runtime to train this model was 26.76209545135498 seconds

Hyperparameteres for model 2 at epoch 55

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3118388652801514 seconds

Loss: 0.3640

Train Accuracy: 86.82%

Test Accuracy: 79.13%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5946226119995117 seconds

LR changed during epoch: 4.57e-05 -> 4.05e-05

total runtime to train this model was 26.52629542350769 seconds

Hyperparameteres for model 3 at epoch 55

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3999202251434326 seconds

Loss: 0.5040

Train Accuracy: 82.08%

Test Accuracy: 78.04%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5953009128570557 seconds

LR changed during epoch: 2.22e-04 -> 2.16e-04

total runtime to train this model was 26.423144578933716 seconds

Hyperparameteres for model 4 at epoch 55

lr: 0.0002758766418360161

```
weight_decay: 0.15
drop_path: 0.3260486304554311
warmup_epochs: 5
batch_size: 256
```

_____ end of hyperparam printing _____
evaluation in 2.3355979919433594 seconds

Loss: 0.4895
Train Accuracy: 82.55%
Test Accuracy: 78.23%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 55) ---

==== PBT Exploit & Explore ===

Top performers: [79.13]
Bottom performers: [74.58]
Member 1: lr changed from 0.0006760652163580131 to 0.0008323987894559101
Member 1: weight_decay changed from 0.14081027580272165 to 0.12440747345343983
Member 1: drop_path changed from 0.0751073183763318 to 0.11706594272416174
Member 1 copied from 2
LR=8.32e-04, WD=0.124, DropPath=0.117, Warmup=5 epochs, Batch=256

=====

Epoch 55 Summary:

=====

Time: 156.43s (Avg member: 31.28s)
Population Mean Accuracy: 77.62%
Best Member Accuracy: 79.13%
Mean Batch Size: 256
Mean Learning Rate: 4.16e-04
Mean Weight Decay: 0.105

=====

Epoch 56/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.675133228302002 seconds
LR changed during epoch: 1.07e-04 -> 1.02e-04
total runtime to train this model was 26.02024221420288 seconds
Hyperparameteres for model 0 at epoch 56
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5747110843658447 seconds

Loss: 0.5080
Train Accuracy: 81.94%
Test Accuracy: 77.71%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.579880714416504 seconds

LR changed during epoch: 8.49e-07 -> 1.67e-04

total runtime to train this model was 26.247706413269043 seconds

Hyperparameteres for model 1 at epoch 56

lr: 0.0008323987894559101

weight_decay: 0.12440747345343983

drop_path: 0.11706594272416174

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3478424549102783 seconds

Loss: 0.3918

Train Accuracy: 85.92%

Test Accuracy: 78.78%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5995256900787354 seconds

LR changed during epoch: 5.94e-05 -> 5.22e-05

total runtime to train this model was 26.486116886138916 seconds

Hyperparameteres for model 2 at epoch 56

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.351222038269043 seconds

Loss: 0.3568

Train Accuracy: 87.21%

Test Accuracy: 79.65%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.593815803527832 seconds

LR changed during epoch: 4.05e-05 -> 3.56e-05

total runtime to train this model was 26.367136478424072 seconds

Hyperparameteres for model 3 at epoch 56

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4531993865966797 seconds

Loss: 0.4900

Train Accuracy: 82.76%

Test Accuracy: 78.47%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.7528960704803467 seconds

LR changed during epoch: 2.16e-04 -> 2.11e-04

total runtime to train this model was 25.901233196258545 seconds

Hyperparameteres for model 4 at epoch 56

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3799216747283936 seconds

Loss: 0.4812

Train Accuracy: 82.92%

Test Accuracy: 78.23%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 56 Summary:

=====

Time: 154.58s (Avg member: 30.92s)

Population Mean Accuracy: 78.57%

Best Member Accuracy: 79.65%

Mean Batch Size: 256

Mean Learning Rate: 4.16e-04

Mean Weight Decay: 0.105

=====

Epoch 57/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5699043273925781 seconds

LR changed during epoch: 1.02e-04 -> 9.75e-05

total runtime to train this model was 26.636080265045166 seconds

Hyperparameteres for model 0 at epoch 57

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4656879901885986 seconds

Loss: 0.5018
Train Accuracy: 82.24%

Test Accuracy: 78.20%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.602339267730713 seconds

LR changed during epoch: 1.67e-04 -> 3.34e-04

total runtime to train this model was 26.341054916381836 seconds

Hyperparameteres for model 1 at epoch 57

lr: 0.0008323987894559101

weight_decay: 0.12440747345343983

drop_path: 0.11706594272416174

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.341938018798828 seconds

Loss: 0.4643
Train Accuracy: 83.54%

Test Accuracy: 77.10%
Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6048977375030518 seconds

LR changed during epoch: 5.22e-05 -> 4.54e-05

total runtime to train this model was 26.785848379135132 seconds

Hyperparameteres for model 2 at epoch 57

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.725217819213867 seconds

Loss: 0.3551
Train Accuracy: 87.46%

Test Accuracy: 79.80%
Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7865989208221436 seconds

LR changed during epoch: 3.56e-05 -> 3.10e-05

total runtime to train this model was 26.100806951522827 seconds

Hyperparameteres for model 3 at epoch 57

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.068969488143921 seconds

Loss: 0.4879

Train Accuracy: 82.69%

Test Accuracy: 78.81%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6253437995910645 seconds

LR changed during epoch: 2.11e-04 -> 2.05e-04

total runtime to train this model was 26.730647087097168 seconds

Hyperparameteres for model 4 at epoch 57

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5357391834259033 seconds

Loss: 0.4703

Train Accuracy: 83.34%

Test Accuracy: 78.73%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 57 Summary:

=====

Time: 155.17s (Avg member: 31.03s)

Population Mean Accuracy: 78.53%

Best Member Accuracy: 79.80%

Mean Batch Size: 256

Mean Learning Rate: 4.16e-04

Mean Weight Decay: 0.105

=====

Epoch 58/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5860486030578613 seconds

LR changed during epoch: 9.75e-05 -> 9.29e-05

total runtime to train this model was 26.693966150283813 seconds

Hyperparameteres for model 0 at epoch 58

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.466893196105957 seconds

Loss: 0.4864

Train Accuracy: 82.85%

Test Accuracy: 77.98%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6836373805999756 seconds

LR changed during epoch: 3.34e-04 -> 5.00e-04

total runtime to train this model was 28.619134426116943 seconds

Hyperparameteres for model 1 at epoch 58

lr: 0.0008323987894559101

weight_decay: 0.12440747345343983

drop_path: 0.11706594272416174

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.277794122695923 seconds

Loss: 0.5535

Train Accuracy: 80.19%

Test Accuracy: 75.90%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6093478202819824 seconds

LR changed during epoch: 4.54e-05 -> 3.90e-05

total runtime to train this model was 26.537694454193115 seconds

Hyperparameteres for model 2 at epoch 58

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3780429363250732 seconds

Loss: 0.3434

Train Accuracy: 87.63%

Test Accuracy: 79.40%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.57765793800354 seconds

LR changed during epoch: 3.10e-05 -> 2.67e-05

total runtime to train this model was 26.12737011909485 seconds

Hyperparameteres for model 3 at epoch 58

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3564248085021973 seconds

Loss: 0.4813

Train Accuracy: 83.03%

Test Accuracy: 78.64%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.594907522201538 seconds

LR changed during epoch: 2.05e-04 -> 1.99e-04

total runtime to train this model was 26.03630828857422 seconds

Hyperparameteres for model 4 at epoch 58

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.2873291969299316 seconds

Loss: 0.4554

Train Accuracy: 83.94%

Test Accuracy: 78.09%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 58 Summary:

=====

Time: 156.08s (Avg member: 31.22s)

Population Mean Accuracy: 78.00%

Best Member Accuracy: 79.40%

Mean Batch Size: 256

Mean Learning Rate: 4.16e-04

Mean Weight Decay: 0.105

=====

Epoch 59/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.769014596939087 seconds

LR changed during epoch: 9.29e-05 -> 8.84e-05

total runtime to train this model was 25.35682964324951 seconds

Hyperparameteres for model 0 at epoch 59

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.380350112915039 seconds

Loss: 0.4885

Train Accuracy: 82.56%

Test Accuracy: 78.38%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5958716869354248 seconds

LR changed during epoch: 5.00e-04 -> 6.67e-04

total runtime to train this model was 26.06966209411621 seconds

Hyperparameteres for model 1 at epoch 59

lr: 0.0008323987894559101

weight_decay: 0.12440747345343983

drop_path: 0.11706594272416174

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.287177324295044 seconds

Loss: 0.6220

Train Accuracy: 77.86%

Test Accuracy: 73.34%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5915050506591797 seconds

LR changed during epoch: 3.90e-05 -> 3.30e-05

total runtime to train this model was 25.899524211883545 seconds

Hyperparameteres for model 2 at epoch 59

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3141026496887207 seconds

Loss: 0.3359

Train Accuracy: 88.04%

Test Accuracy: 79.79%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5892338752746582 seconds

LR changed during epoch: 2.67e-05 -> 2.27e-05

total runtime to train this model was 25.70659065246582 seconds

Hyperparameteres for model 3 at epoch 59

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3452367782592773 seconds

Loss: 0.4750

Train Accuracy: 83.15%

Test Accuracy: 78.67%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6364095211029053 seconds

LR changed during epoch: 1.99e-04 -> 1.93e-04

total runtime to train this model was 27.0446617603302 seconds

Hyperparameteres for model 4 at epoch 59

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.5640413761138916 seconds

Loss: 0.4447

Train Accuracy: 84.04%

Test Accuracy: 78.17%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 59 Summary:

=====

Time: 153.36s (Avg member: 30.67s)

Population Mean Accuracy: 77.67%

Best Member Accuracy: 79.79%

Mean Batch Size: 256

Mean Learning Rate: 4.16e-04

Mean Weight Decay: 0.105

=====

Epoch 60/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5807170867919922 seconds
LR changed during epoch: 8.84e-05 -> 8.38e-05
total runtime to train this model was 26.0324068069458 seconds
Hyperparameteres for model 0 at epoch 60
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3971879482269287 seconds
Loss: 0.4739
Train Accuracy: 83.15%
Test Accuracy: 78.23%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5813689231872559 seconds
LR changed during epoch: 6.67e-04 -> 8.32e-04
total runtime to train this model was 25.953754901885986 seconds
Hyperparameteres for model 1 at epoch 60
lr: 0.0008323987894559101

weight_decay: 0.12440747345343983

drop_path: 0.11706594272416174

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.307507276535034 seconds
Loss: 0.6816
Train Accuracy: 75.68%
Test Accuracy: 73.17%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5847678184509277 seconds
LR changed during epoch: 3.30e-05 -> 2.76e-05
total runtime to train this model was 26.46356987953186 seconds
Hyperparameteres for model 2 at epoch 60
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.490771532058716 seconds

Loss: 0.3273

Train Accuracy: 88.41%

Test Accuracy: 79.70%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.622725009918213 seconds

LR changed during epoch: 2.27e-05 -> 1.90e-05

total runtime to train this model was 26.246074199676514 seconds

Hyperparameteres for model 3 at epoch 60

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.571291923522949 seconds

Loss: 0.4650

Train Accuracy: 83.59%

Test Accuracy: 78.67%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.607511043548584 seconds

LR changed during epoch: 1.93e-04 -> 1.87e-04

total runtime to train this model was 26.68192768096924 seconds

Hyperparameteres for model 4 at epoch 60

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3559036254882812 seconds

Loss: 0.4335

Train Accuracy: 84.55%

Test Accuracy: 78.79%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 60) ---

==== PBT Exploit & Explore ===

Top performers: [79.7]

Bottom performers: [73.17]

Member 1: lr changed from 0.0008323987894559101 to 0.000821921358689157

Member 1: weight_decay changed from 0.12440747345343983 to 0.1473940940550669

Member 1: drop_path changed from 0.11706594272416174 to 0.15189809731483156

Member 1 copied from 2

LR=8.22e-04, WD=0.147, DropPath=0.152, Warmup=5 epochs, Batch=256

=====

Epoch 60 Summary:

=====

Time: 153.70s (Avg member: 30.74s)

Population Mean Accuracy: 77.71%

Best Member Accuracy: 79.70%

Mean Batch Size: 256

Mean Learning Rate: 4.14e-04

Mean Weight Decay: 0.110

=====

Epoch 61/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5746805667877197 seconds

LR changed during epoch: 8.38e-05 -> 7.93e-05

total runtime to train this model was 26.526609182357788 seconds

Hyperparameteres for model 0 at epoch 61

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.329962968826294 seconds

Loss: 0.4689

Train Accuracy: 83.26%

Test Accuracy: 78.91%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.5948405265808105 seconds

LR changed during epoch: 8.39e-07 -> 1.65e-04

total runtime to train this model was 26.11017608642578 seconds

Hyperparameteres for model 1 at epoch 61

lr: 0.000821921358689157

weight_decay: 0.1473940940550669

drop_path: 0.15189809731483156

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3833813667297363 seconds

Loss: 0.3731

Train Accuracy: 86.57%

Test Accuracy: 78.52%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7449226379394531 seconds
LR changed during epoch: 2.76e-05 -> 2.26e-05
total runtime to train this model was 25.816661834716797 seconds
Hyperparameteres for model 2 at epoch 61
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.378592014312744 seconds

Loss: 0.3211
Train Accuracy: 88.69%
Test Accuracy: 79.56%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5769832134246826 seconds
LR changed during epoch: 1.90e-05 -> 1.56e-05
total runtime to train this model was 26.7410671710968 seconds
Hyperparameteres for model 3 at epoch 61
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4387030601501465 seconds

Loss: 0.4586
Train Accuracy: 83.89%
Test Accuracy: 78.67%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5832877159118652 seconds
LR changed during epoch: 1.87e-04 -> 1.81e-04
total runtime to train this model was 26.958659648895264 seconds
Hyperparameteres for model 4 at epoch 61
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.333120346069336 seconds
Loss: 0.4291
Train Accuracy: 84.72%
Test Accuracy: 78.77%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====
Epoch 61 Summary:
=====

Time: 154.34s (Avg member: 30.87s)
Population Mean Accuracy: 78.89%
Best Member Accuracy: 79.56%
Mean Batch Size: 256
Mean Learning Rate: 4.14e-04
Mean Weight Decay: 0.110

=====
Epoch 62/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.59517240524292 seconds
LR changed during epoch: 7.93e-05 -> 7.49e-05
total runtime to train this model was 26.94625163078308 seconds
Hyperparameteres for model 0 at epoch 62
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.195525884628296 seconds
Loss: 0.4556
Train Accuracy: 83.81%
Test Accuracy: 78.57%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7035958766937256 seconds
LR changed during epoch: 1.65e-04 -> 3.30e-04
total runtime to train this model was 27.180864810943604 seconds
Hyperparameteres for model 1 at epoch 62
lr: 0.000821921358689157

weight_decay: 0.1473940940550669

drop_path: 0.15189809731483156

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.388505220413208 seconds
Loss: 0.4598

Train Accuracy: 83.62%
Test Accuracy: 76.87%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.604419231414795 seconds
LR changed during epoch: 2.26e-05 -> 1.81e-05
total runtime to train this model was 26.673330068588257 seconds
Hyperparameteres for model 2 at epoch 62
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.405834436416626 seconds
Loss: 0.3149
Train Accuracy: 88.68%
Test Accuracy: 80.05%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5975008010864258 seconds
LR changed during epoch: 1.56e-05 -> 1.26e-05
total runtime to train this model was 26.72362995147705 seconds
Hyperparameteres for model 3 at epoch 62
lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.554987907409668 seconds
Loss: 0.4608
Train Accuracy: 83.53%
Test Accuracy: 78.62%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.717789649963379 seconds
LR changed during epoch: 1.81e-04 -> 1.75e-04
total runtime to train this model was 26.222925186157227 seconds
Hyperparameteres for model 4 at epoch 62
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1458377838134766 seconds

Loss: 0.4135

Train Accuracy: 85.21%

Test Accuracy: 78.92%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 62 Summary:

=====

Time: 156.93s (Avg member: 31.39s)

Population Mean Accuracy: 78.61%

Best Member Accuracy: 80.05%

Mean Batch Size: 256

Mean Learning Rate: 4.14e-04

Mean Weight Decay: 0.110

=====

Epoch 63/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5966708660125732 seconds

LR changed during epoch: 7.49e-05 -> 7.05e-05

total runtime to train this model was 26.61015772819519 seconds

Hyperparameteres for model 0 at epoch 63

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.359192132949829 seconds

Loss: 0.4529

Train Accuracy: 83.92%

Test Accuracy: 78.64%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.584803819656372 seconds

LR changed during epoch: 3.30e-04 -> 4.94e-04

total runtime to train this model was 26.700479745864868 seconds

Hyperparameteres for model 1 at epoch 63

lr: 0.000821921358689157

weight_decay: 0.1473940940550669

drop_path: 0.15189809731483156

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.405362606048584 seconds

Loss: 0.5368

Train Accuracy: 80.71%

Test Accuracy: 74.06%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5691337585449219 seconds

LR changed during epoch: 1.81e-05 -> 1.42e-05

total runtime to train this model was 26.509938716888428 seconds

Hyperparameteres for model 2 at epoch 63

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8919620513916016 seconds

Loss: 0.3128

Train Accuracy: 88.89%

Test Accuracy: 79.81%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7178988456726074 seconds

LR changed during epoch: 1.26e-05 -> 9.90e-06

total runtime to train this model was 26.29766845703125 seconds

Hyperparameteres for model 3 at epoch 63

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5786941051483154 seconds

Loss: 0.4529

Train Accuracy: 84.00%

Test Accuracy: 79.18%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6081852912902832 seconds

LR changed during epoch: 1.75e-04 -> 1.68e-04

total runtime to train this model was 26.89948320388794 seconds

Hyperparameteres for model 4 at epoch 63

lr: 0.0002758766418360161

```
weight_decay: 0.15
drop_path: 0.3260486304554311
warmup_epochs: 5
batch_size: 256
_____ end of hyperparam printing _____
evaluation in 2.3343329429626465 seconds
Loss: 0.4071
Train Accuracy: 85.65%
Test Accuracy: 78.40%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt
=====
Epoch 63 Summary:
=====
Time: 154.90s (Avg member: 30.98s)
Population Mean Accuracy: 78.02%
Best Member Accuracy: 79.81%
Mean Batch Size: 256
Mean Learning Rate: 4.14e-04
Mean Weight Decay: 0.110
=====
Epoch 64/70
=====
--- Training Member 0 (Batch size: 256) ---
built data in 1.5938639640808105 seconds
LR changed during epoch: 7.05e-05 -> 6.61e-05
total runtime to train this model was 26.58721137046814 seconds
Hyperparameteres for model 0 at epoch 64
lr: 0.00018945798503857986
weight_decay: 0.10256541999051386
drop_path: 0.3009444390241068
warmup_epochs: 5
batch_size: 256
_____ end of hyperparam printing _____
evaluation in 2.4236767292022705 seconds
Loss: 0.4436
Train Accuracy: 84.19%
Test Accuracy: 78.84%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt
--- Training Member 1 (Batch size: 256) ---
built data in 1.6182606220245361 seconds
LR changed during epoch: 4.94e-04 -> 6.58e-04
total runtime to train this model was 26.168837785720825 seconds
Hyperparameteres for model 1 at epoch 64
lr: 0.000821921358689157
weight_decay: 0.1473940940550669
```

drop_path: 0.15189809731483156

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5913264751434326 seconds

Loss: 0.6141

Train Accuracy: 78.02%

Test Accuracy: 74.61%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6233210563659668 seconds

LR changed during epoch: 1.42e-05 -> 1.07e-05

total runtime to train this model was 26.953799962997437 seconds

Hyperparameteres for model 2 at epoch 64

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.345360279083252 seconds

Loss: 0.3090

Train Accuracy: 89.05%

Test Accuracy: 79.90%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5787897109985352 seconds

LR changed during epoch: 9.90e-06 -> 7.56e-06

total runtime to train this model was 26.667505979537964 seconds

Hyperparameteres for model 3 at epoch 64

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3941845893859863 seconds

Loss: 0.4493

Train Accuracy: 84.18%

Test Accuracy: 78.86%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6073081493377686 seconds
LR changed during epoch: 1.68e-04 -> 1.62e-04
total runtime to train this model was 26.64791488647461 seconds
Hyperparameteres for model 4 at epoch 64
lr: 0.0002758766418360161

weight_decay: 0.15
drop_path: 0.3260486304554311
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.678356647491455 seconds

Loss: 0.3989
Train Accuracy: 85.79%
Test Accuracy: 79.03%
Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====
Epoch 64 Summary:
=====
Time: 155.74s (Avg member: 31.15s)
Population Mean Accuracy: 78.25%
Best Member Accuracy: 79.90%
Mean Batch Size: 256
Mean Learning Rate: 4.14e-04
Mean Weight Decay: 0.110

=====
Epoch 65/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.7231833934783936 seconds
LR changed during epoch: 6.61e-05 -> 6.18e-05
total runtime to train this model was 26.373940229415894 seconds
Hyperparameteres for model 0 at epoch 65
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386
drop_path: 0.3009444390241068
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8072402477264404 seconds
Loss: 0.4306
Train Accuracy: 84.68%
Test Accuracy: 79.23%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.597184658050537 seconds
LR changed during epoch: 6.58e-04 -> 8.22e-04

total runtime to train this model was 26.420361042022705 seconds

Hyperparameteres for model 1 at epoch 65

lr: 0.000821921358689157

weight_decay: 0.1473940940550669

drop_path: 0.15189809731483156

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.340134382247925 seconds

Loss: 0.6751

Train Accuracy: 76.01%

Test Accuracy: 73.11%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5805797576904297 seconds

LR changed during epoch: 1.07e-05 -> 7.74e-06

total runtime to train this model was 26.390743494033813 seconds

Hyperparameteres for model 2 at epoch 65

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4092323780059814 seconds

Loss: 0.3066

Train Accuracy: 89.02%

Test Accuracy: 79.99%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.6211299896240234 seconds

LR changed during epoch: 7.56e-06 -> 5.56e-06

total runtime to train this model was 26.238811254501343 seconds

Hyperparameteres for model 3 at epoch 65

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.178579330444336 seconds

Loss: 0.4477

Train Accuracy: 84.18%

Test Accuracy: 79.10%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.692652940750122 seconds
LR changed during epoch: 1.62e-04 -> 1.55e-04
total runtime to train this model was 26.568029642105103 seconds
Hyperparameteres for model 4 at epoch 65
lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4279587268829346 seconds
Loss: 0.3898
Train Accuracy: 86.12%
Test Accuracy: 78.94%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 65) ---

==== PBT Exploit & Explore ====
Top performers: [79.99]
Bottom performers: [73.11]
Member 1: lr changed from 0.000821921358689157 to 0.0005885301793533709
Member 1: weight_decay changed from 0.1473940940550669 to 0.1387930382556192
Member 1: drop_path changed from 0.15189809731483156 to 0.0779392467673858
Member 1 copied from 2
LR=5.89e-04, WD=0.139, DropPath=0.078, Warmup=5 epochs, Batch=256

=====
Epoch 65 Summary:
=====

Time: 154.62s (Avg member: 30.92s)
Population Mean Accuracy: 78.07%
Best Member Accuracy: 79.99%
Mean Batch Size: 256
Mean Learning Rate: 3.67e-04
Mean Weight Decay: 0.108

=====
Epoch 66/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6069796085357666 seconds
LR changed during epoch: 6.18e-05 -> 5.76e-05
total runtime to train this model was 25.923857927322388 seconds
Hyperparameteres for model 0 at epoch 66
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3614163398742676 seconds

Loss: 0.4229

Train Accuracy: 85.12%

Test Accuracy: 78.38%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.6078379154205322 seconds

LR changed during epoch: 6.01e-07 -> 1.18e-04

total runtime to train this model was 26.02229595184326 seconds

Hyperparameteres for model 1 at epoch 66

lr: 0.0005885301793533709

weight_decay: 0.1387930382556192

drop_path: 0.0779392467673858

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3609676361083984 seconds

Loss: 0.3498

Train Accuracy: 87.40%

Test Accuracy: 79.48%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.6375937461853027 seconds

LR changed during epoch: 7.74e-06 -> 5.32e-06

total runtime to train this model was 26.32723307609558 seconds

Hyperparameteres for model 2 at epoch 66

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2423009872436523 seconds

Loss: 0.3024

Train Accuracy: 89.18%

Test Accuracy: 79.96%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.667954921722412 seconds

LR changed during epoch: 5.56e-06 -> 3.92e-06

total runtime to train this model was 27.687939405441284 seconds

Hyperparameteres for model 3 at epoch 66

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.566507339477539 seconds

Loss: 0.4465

Train Accuracy: 84.35%

Test Accuracy: 79.16%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.6257843971252441 seconds

LR changed during epoch: 1.55e-04 -> 1.48e-04

total runtime to train this model was 27.594220876693726 seconds

Hyperparameteres for model 4 at epoch 66

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4849050045013428 seconds

Loss: 0.3781

Train Accuracy: 86.51%

Test Accuracy: 79.74%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 66 Summary:

=====

Time: 155.94s (Avg member: 31.19s)

Population Mean Accuracy: 79.34%

Best Member Accuracy: 79.96%

Mean Batch Size: 256

Mean Learning Rate: 3.67e-04

Mean Weight Decay: 0.108

=====

Epoch 67/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.6157925128936768 seconds

LR changed during epoch: 5.76e-05 -> 5.34e-05

total runtime to train this model was 27.18154788017273 seconds

Hyperparameteres for model 0 at epoch 67

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0776705741882324 seconds

Loss: 0.4212

Train Accuracy: 84.77%

Test Accuracy: 78.93%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.7190885543823242 seconds

LR changed during epoch: 1.18e-04 -> 2.36e-04

total runtime to train this model was 26.943302392959595 seconds

Hyperparameteres for model 1 at epoch 67

lr: 0.0005885301793533709

weight_decay: 0.1387930382556192

drop_path: 0.0779392467673858

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.381641149520874 seconds

Loss: 0.4138

Train Accuracy: 85.13%

Test Accuracy: 78.15%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5999820232391357 seconds

LR changed during epoch: 5.32e-06 -> 3.43e-06

total runtime to train this model was 27.12546730041504 seconds

Hyperparameteres for model 2 at epoch 67

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4272122383117676 seconds

Loss: 0.2992

Train Accuracy: 89.33%

Test Accuracy: 79.84%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.604787826538086 seconds

LR changed during epoch: 3.92e-06 -> 2.64e-06

total runtime to train this model was 27.22920322418213 seconds

Hyperparameteres for model 3 at epoch 67

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.459765672683716 seconds

Loss: 0.4425

Train Accuracy: 84.23%

Test Accuracy: 79.08%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.7590982913970947 seconds

LR changed during epoch: 1.48e-04 -> 1.42e-04

total runtime to train this model was 27.105284214019775 seconds

Hyperparameteres for model 4 at epoch 67

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.02021861076355 seconds

Loss: 0.3628

Train Accuracy: 87.13%

Test Accuracy: 79.17%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 67 Summary:

=====

Time: 158.55s (Avg member: 31.71s)

Population Mean Accuracy: 79.03%

Best Member Accuracy: 79.84%

Mean Batch Size: 256

Mean Learning Rate: 3.67e-04

Mean Weight Decay: 0.108

=====

Epoch 68/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5780761241912842 seconds
LR changed during epoch: 5.34e-05 -> 4.94e-05
total runtime to train this model was 26.261953115463257 seconds
Hyperparameteres for model 0 at epoch 68
lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.32755446434021 seconds

Loss: 0.4146
Train Accuracy: 85.27%
Test Accuracy: 79.09%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5851342678070068 seconds
LR changed during epoch: 2.36e-04 -> 3.54e-04
total runtime to train this model was 26.672332525253296 seconds
Hyperparameteres for model 1 at epoch 68
lr: 0.0005885301793533709

weight_decay: 0.1387930382556192

drop_path: 0.0779392467673858

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3872222900390625 seconds

Loss: 0.4738
Train Accuracy: 83.00%
Test Accuracy: 76.84%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5860600471496582 seconds
LR changed during epoch: 3.43e-06 -> 2.08e-06
total runtime to train this model was 26.425990104675293 seconds
Hyperparameteres for model 2 at epoch 68
lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.817676067352295 seconds

Loss: 0.2988

Train Accuracy: 89.49%

Test Accuracy: 79.94%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.7273411750793457 seconds

LR changed during epoch: 2.64e-06 -> 1.73e-06

total runtime to train this model was 26.51345467567444 seconds

Hyperparameteres for model 3 at epoch 68

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.565326452255249 seconds

Loss: 0.4406

Train Accuracy: 84.39%

Test Accuracy: 79.14%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.600703477859497 seconds

LR changed during epoch: 1.42e-04 -> 1.35e-04

total runtime to train this model was 26.26438879966736 seconds

Hyperparameteres for model 4 at epoch 68

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.3416264057159424 seconds

Loss: 0.3564

Train Accuracy: 87.25%

Test Accuracy: 79.16%

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Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 68 Summary:

=====

Time: 153.89s (Avg member: 30.78s)

Population Mean Accuracy: 78.83%

Best Member Accuracy: 79.94%

Mean Batch Size: 256

Mean Learning Rate: 3.67e-04

Mean Weight Decay: 0.108

```
=====
Epoch 69/70
=====
```

```
--- Training Member 0 (Batch size: 256) ---
built data in 1.585193157196045 seconds
LR changed during epoch: 4.94e-05 -> 4.55e-05
total runtime to train this model was 26.668357133865356 seconds
Hyperparameteres for model 0 at epoch 69
lr: 0.00018945798503857986
```

```
weight_decay: 0.10256541999051386
```

```
drop_path: 0.3009444390241068
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.3153061866760254 seconds
```

```
Loss: 0.4091
Train Accuracy: 85.20%
Test Accuracy: 79.51%
```

```
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```

```
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt
```

```
--- Training Member 1 (Batch size: 256) ---
built data in 1.6404213905334473 seconds
LR changed during epoch: 3.54e-04 -> 4.71e-04
total runtime to train this model was 25.91674017906189 seconds
Hyperparameteres for model 1 at epoch 69
lr: 0.0005885301793533709
```

```
weight_decay: 0.1387930382556192
```

```
drop_path: 0.0779392467673858
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.9568965435028076 seconds
```

```
Loss: 0.5412
Train Accuracy: 80.81%
Test Accuracy: 76.69%
```

```
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```

```
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt
```

```
--- Training Member 2 (Batch size: 256) ---
built data in 1.6815299987792969 seconds
LR changed during epoch: 2.08e-06 -> 1.27e-06
total runtime to train this model was 26.092591285705566 seconds
Hyperparameteres for model 2 at epoch 69
lr: 0.00046580972075259094
```

```
weight_decay: 0.04163760518412271
```

```
drop_path: 0.21704259365986278
```

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4738495349884033 seconds

Loss: 0.2981

Train Accuracy: 89.36%

Test Accuracy: 80.02%

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Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5948238372802734 seconds

LR changed during epoch: 1.73e-06 -> 1.18e-06

total runtime to train this model was 25.98648166656494 seconds

Hyperparameteres for model 3 at epoch 69

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3198492527008057 seconds

Loss: 0.4413

Train Accuracy: 84.42%

Test Accuracy: 79.19%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5866916179656982 seconds

LR changed during epoch: 1.35e-04 -> 1.28e-04

total runtime to train this model was 26.1940655708313 seconds

Hyperparameteres for model 4 at epoch 69

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3798160552978516 seconds

Loss: 0.3467

Train Accuracy: 87.59%

Test Accuracy: 79.16%

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Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 69 Summary:

=====

Time: 152.60s (Avg member: 30.52s)

Population Mean Accuracy: 78.91%

Best Member Accuracy: 80.02%

Mean Batch Size: 256

Mean Learning Rate: 3.67e-04

Mean Weight Decay: 0.108

=====

Epoch 70/70

=====

--- Training Member 0 (Batch size: 256) ---

built data in 1.5988879203796387 seconds

LR changed during epoch: 4.55e-05 -> 4.17e-05

total runtime to train this model was 26.11183786392212 seconds

Hyperparameteres for model 0 at epoch 70

lr: 0.00018945798503857986

weight_decay: 0.10256541999051386

drop_path: 0.3009444390241068

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.8317294120788574 seconds

Loss: 0.4003

Train Accuracy: 85.83%

Test Accuracy: 79.30%

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Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---

built data in 1.729240894317627 seconds

LR changed during epoch: 4.71e-04 -> 5.89e-04

total runtime to train this model was 26.0502827167511 seconds

Hyperparameteres for model 1 at epoch 70

lr: 0.0005885301793533709

weight_decay: 0.1387930382556192

drop_path: 0.0779392467673858

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.707578420639038 seconds

Loss: 0.5963

Train Accuracy: 78.66%

Test Accuracy: 75.21%

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Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---

built data in 1.5818586349487305 seconds

LR changed during epoch: 1.27e-06 -> 1.00e-06

total runtime to train this model was 26.55671739578247 seconds

Hyperparameteres for model 2 at epoch 70

lr: 0.00046580972075259094

weight_decay: 0.04163760518412271

drop_path: 0.21704259365986278

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.386528730392456 seconds

Loss: 0.2973

Train Accuracy: 89.56%

Test Accuracy: 80.05%

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Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---

built data in 1.5947270393371582 seconds

LR changed during epoch: 1.18e-06 -> 1.00e-06

total runtime to train this model was 26.539469718933105 seconds

Hyperparameteres for model 3 at epoch 70

lr: 0.0003155456675032866

weight_decay: 0.10835600837460257

drop_path: 0.20632463667325823

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3448305130004883 seconds

Loss: 0.4420

Train Accuracy: 84.46%

Test Accuracy: 79.18%

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Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 256) ---

built data in 1.5811882019042969 seconds

LR changed during epoch: 1.28e-04 -> 1.22e-04

total runtime to train this model was 26.060494422912598 seconds

Hyperparameteres for model 4 at epoch 70

lr: 0.0002758766418360161

weight_decay: 0.15

drop_path: 0.3260486304554311

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.9221584796905518 seconds

Loss: 0.3372

Train Accuracy: 87.96%

Test Accuracy: 79.44%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 70) ---

==== PBT Exploit & Explore ====

Top performers: [80.05]

Bottom performers: [75.21]

Member 1: lr changed from 0.0005885301793533709 to 0.0005083398354553205

Member 1: weight_decay changed from 0.1387930382556192 to 0.11945727676106856

Member 1: drop_path changed from 0.0779392467673858 to 0.14680254946519822

Member 1 copied from 2

LR=5.08e-04, WD=0.119, DropPath=0.147, Warmup=5 epochs, Batch=256

=====

Epoch 70 Summary:

=====

Time: 153.89s (Avg member: 30.77s)

Population Mean Accuracy: 78.64%

Best Member Accuracy: 80.05%

Mean Batch Size: 256

Mean Learning Rate: 3.51e-04

Mean Weight Decay: 0.104

=====

PBT TRAINING COMPLETE

=====

Best member: 2

Best accuracy: 80.05%

Best hyperparameters:

Learning Rate: 4.66e-04

Weight Decay: 0.042

Drop Path Rate: 0.217

Warmup Epochs: 5

Batch Size: 256

=====

PBT TIMING REPORT

=====

Overall Statistics	Value
Total runtime	10903.85s (181.73 min)
Number of epochs	70
Number of population updates	14

Epoch Timing	Value
Average epoch time	155.75s
Std epoch time	2.78s
Min epoch time	150.21s (epoch 19)
Max epoch time	164.45s (epoch 43)

Member Training Timing	Value
Average member time per epoch	31.15s
Total training time	10902.22s
Training efficiency	100.0%

Population Update Timing	Value
Average update time	0.01s
Total update time	0.20s

Update efficiency 0.0%

Batch Size Analysis Avg Time Samples

Batch size 256 31.15s 350

Per-Member Statistics Avg Time Total Time

Member 0	31.12s	2178.11s
Member 1	31.12s	2178.67s
Member 2	31.13s	2178.84s
Member 3	31.15s	2180.37s
Member 4	31.23s	2186.22s

Experiment completed successfully!

Results saved to: pbt_vit_timing_results.png

Detailed timing saved to: pbt_detailed_timing.png