

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 1.607729434967041 seconds
/tmp/ipython-input-228132033.py:694: FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch.a
with torch.cuda.amp.autocast(enabled=torch.cuda.is_available()):`
LR changed during epoch: 2.08e-07 -> 4.09e-05
total runtime to train this model was 27.056747436523438 seconds
Hyperparameteres for model 0 at epoch 1
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4760406017303467 seconds
Loss: 2.0436
Train Accuracy: 23.96%
Test Accuracy: 28.43%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6654274463653564 seconds
LR changed during epoch: 4.70e-07 -> 9.27e-05
total runtime to train this model was 26.708059549331665 seconds
Hyperparameteres for model 1 at epoch 1
lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4118690490722656 seconds
Loss: 1.9848

Train Accuracy: 25.87%
Test Accuracy: 30.61%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6505866050720215 seconds
LR changed during epoch: 3.76e-07 -> 7.41e-05
total runtime to train this model was 27.082111597061157 seconds
Hyperparameteres for model 2 at epoch 1
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.444577693939209 seconds
Loss: 2.0086
Train Accuracy: 25.19%
Test Accuracy: 30.85%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7281436920166016 seconds
LR changed during epoch: 2.65e-07 -> 5.23e-05
total runtime to train this model was 27.381625175476074 seconds
Hyperparameteres for model 3 at epoch 1
lr: 0.0002599244548218043

weight_decay: 0.1338501091256788

drop_path: 0.15685692911300778

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5647311210632324 seconds
Loss: 2.0229
Train Accuracy: 25.16%
Test Accuracy: 31.05%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.626997947692871 seconds
LR changed during epoch: 6.69e-07 -> 1.32e-04
total runtime to train this model was 27.273749113082886 seconds
Hyperparameteres for model 4 at epoch 1
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4408957958221436 seconds

Loss: 1.9742

Train Accuracy: 26.27%

Test Accuracy: 32.01%

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Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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Epoch 1 Summary:

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Time: 158.37s (Avg member: 31.67s)

Population Mean Accuracy: 30.59%

Best Member Accuracy: 32.01%

Mean Batch Size: 256

Mean Learning Rate: 3.90e-04

Mean Weight Decay: 0.080

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Epoch 2/70

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

built data in 1.6553988456726074 seconds

LR changed during epoch: 4.09e-05 -> 8.16e-05

total runtime to train this model was 27.03568410873413 seconds

Hyperparameteres for model 0 at epoch 2

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7468278408050537 seconds

Loss: 1.8263

Train Accuracy: 32.59%

Test Accuracy: 32.72%

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Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.7746741771697998 seconds

LR changed during epoch: 9.27e-05 -> 1.85e-04

total runtime to train this model was 27.191171407699585 seconds

Hyperparameteres for model 1 at epoch 2

lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6429591178894043 seconds

Loss: 1.7668

Train Accuracy: 34.10%

Test Accuracy: 35.23%

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Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6446757316589355 seconds

LR changed during epoch: 7.41e-05 -> 1.48e-04

total runtime to train this model was 27.364646196365356 seconds

Hyperparameteres for model 2 at epoch 2

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4560720920562744 seconds

Loss: 1.7974

Train Accuracy: 33.11%

Test Accuracy: 36.09%

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Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6074895858764648 seconds

LR changed during epoch: 5.23e-05 -> 1.04e-04

total runtime to train this model was 27.31416654586792 seconds

Hyperparameteres for model 3 at epoch 2

lr: 0.0002599244548218043

weight_decay: 0.1338501091256788

drop_path: 0.15685692911300778

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.449901819229126 seconds

Loss: 1.8212

Train Accuracy: 32.70%

Test Accuracy: 33.20%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.8016035556793213 seconds

LR changed during epoch: 1.32e-04 -> 2.63e-04

total runtime to train this model was 27.159877061843872 seconds

Hyperparameteres for model 4 at epoch 2

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3622403144836426 seconds

Loss: 1.7546

Train Accuracy: 34.45%

Test Accuracy: 37.02%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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Epoch 2 Summary:

=====

Time: 159.46s (Avg member: 31.89s)

Population Mean Accuracy: 34.85%

Best Member Accuracy: 37.02%

Mean Batch Size: 256

Mean Learning Rate: 3.90e-04

Mean Weight Decay: 0.080

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Epoch 3/70

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

built data in 1.640331506729126 seconds

LR changed during epoch: 8.16e-05 -> 1.22e-04

total runtime to train this model was 27.530497312545776 seconds

Hyperparameteres for model 0 at epoch 3

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.458322763442993 seconds

Loss: 1.7229

Train Accuracy: 36.12%

Test Accuracy: 37.83%

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Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6357157230377197 seconds

LR changed during epoch: 1.85e-04 -> 2.77e-04

total runtime to train this model was 27.645832061767578 seconds

Hyperparameteres for model 1 at epoch 3

lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.515003204345703 seconds

Loss: 1.6361

Train Accuracy: 39.56%

Test Accuracy: 42.06%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.675788402557373 seconds

LR changed during epoch: 1.48e-04 -> 2.22e-04

total runtime to train this model was 27.179317235946655 seconds

Hyperparameteres for model 2 at epoch 3

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.626768112182617 seconds

Loss: 1.6774

Train Accuracy: 37.95%

Test Accuracy: 41.34%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6333222389221191 seconds

LR changed during epoch: 1.04e-04 -> 1.56e-04

total runtime to train this model was 27.548335552215576 seconds

Hyperparameteres for model 3 at epoch 3

lr: 0.0002599244548218043

weight_decay: 0.1338501091256788

drop_path: 0.15685692911300778

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.446821689605713 seconds

Loss: 1.7207

Train Accuracy: 36.05%

Test Accuracy: 38.68%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6805577278137207 seconds
LR changed during epoch: 2.63e-04 -> 3.94e-04
total runtime to train this model was 27.3454372882843 seconds
Hyperparameteres for model 4 at epoch 3
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5338399410247803 seconds

Loss: 1.6271
Train Accuracy: 39.79%

Test Accuracy: 42.97%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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Epoch 3 Summary:

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Time: 160.30s (Avg member: 32.06s)

Population Mean Accuracy: 40.58%

Best Member Accuracy: 42.97%

Mean Batch Size: 256

Mean Learning Rate: 3.90e-04

Mean Weight Decay: 0.080

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Epoch 4/70

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

built data in 1.6386559009552002 seconds

LR changed during epoch: 1.22e-04 -> 1.63e-04

total runtime to train this model was 27.363635778427124 seconds

Hyperparameteres for model 0 at epoch 4

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.523662567138672 seconds

Loss: 1.6328
Train Accuracy: 39.85%

Test Accuracy: 42.48%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.7306804656982422 seconds

LR changed during epoch: 2.77e-04 -> 3.69e-04

total runtime to train this model was 27.363498210906982 seconds

Hyperparameteres for model 1 at epoch 4

lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.445344924926758 seconds

Loss: 1.5213

Train Accuracy: 44.46%

Test Accuracy: 46.64%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.5835020542144775 seconds

LR changed during epoch: 2.22e-04 -> 2.95e-04

total runtime to train this model was 27.506552696228027 seconds

Hyperparameteres for model 2 at epoch 4

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.399271011352539 seconds

Loss: 1.5631

Train Accuracy: 42.74%

Test Accuracy: 45.18%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6549072265625 seconds

LR changed during epoch: 1.56e-04 -> 2.08e-04

total runtime to train this model was 27.235344171524048 seconds

Hyperparameteres for model 3 at epoch 4

lr: 0.0002599244548218043

weight_decay: 0.1338501091256788

drop_path: 0.15685692911300778

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.9906694889068604 seconds

Loss: 1.6255

Train Accuracy: 40.13%

Test Accuracy: 43.42%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.7559638023376465 seconds
LR changed during epoch: 3.94e-04 -> 5.25e-04
total runtime to train this model was 27.809192180633545 seconds
Hyperparameteres for model 4 at epoch 4
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5259265899658203 seconds
Loss: 1.5216
Train Accuracy: 44.28%
Test Accuracy: 44.04%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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Epoch 4 Summary:

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Time: 160.84s (Avg member: 32.17s)
Population Mean Accuracy: 44.35%
Best Member Accuracy: 46.64%
Mean Batch Size: 256
Mean Learning Rate: 3.90e-04
Mean Weight Decay: 0.080

=====

Epoch 5/70

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--- Training Member 0 (Batch size: 256) ---
built data in 1.6964290142059326 seconds
LR changed during epoch: 1.63e-04 -> 2.03e-04
total runtime to train this model was 27.635170221328735 seconds
Hyperparameteres for model 0 at epoch 5
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.57662034034729 seconds
Loss: 1.5221
Train Accuracy: 44.45%
Test Accuracy: 45.37%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6287767887115479 seconds

LR changed during epoch: 3.69e-04 -> 4.61e-04

total runtime to train this model was 27.399447917938232 seconds

Hyperparameteres for model 1 at epoch 5

lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.0621373653411865 seconds

Loss: 1.4439

Train Accuracy: 47.23%

Test Accuracy: 49.37%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.861074686050415 seconds

LR changed during epoch: 2.95e-04 -> 3.69e-04

total runtime to train this model was 27.603472232818604 seconds

Hyperparameteres for model 2 at epoch 5

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.632399320602417 seconds

Loss: 1.4792

Train Accuracy: 45.86%

Test Accuracy: 49.17%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6244053840637207 seconds

LR changed during epoch: 2.08e-04 -> 2.60e-04

total runtime to train this model was 27.710157871246338 seconds

Hyperparameteres for model 3 at epoch 5

lr: 0.0002599244548218043

weight_decay: 0.1338501091256788

drop_path: 0.15685692911300778

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5165350437164307 seconds
Loss: 1.5255
Train Accuracy: 44.19%
Test Accuracy: 44.77%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.702909231185913 seconds
LR changed during epoch: 5.25e-04 -> 6.56e-04
total runtime to train this model was 27.670177221298218 seconds
Hyperparameteres for model 4 at epoch 5
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.878309726715088 seconds
Loss: 1.4548
Train Accuracy: 46.81%
Test Accuracy: 49.09%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

==== PBT Exploit & Explore ====
Top performers: [49.37]
Bottom performers: [44.77]
Member 3: lr changed from 0.0002599244548218043 to 0.0003095613189558857
Member 3: weight_decay changed from 0.1338501091256788 to 0.13680183431013873
Member 3: drop_path changed from 0.15685692911300778 to 0.12123592280214976
Member 3 copied from 1
LR=3.10e-04, WD=0.137, DropPath=0.121, Warmup=5 epochs, Batch=256

=====
Epoch 5 Summary:
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Time: 161.56s (Avg member: 32.31s)
Population Mean Accuracy: 47.55%
Best Member Accuracy: 49.37%
Mean Batch Size: 256
Mean Learning Rate: 4.00e-04
Mean Weight Decay: 0.081

=====
Epoch 6/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.7655959129333496 seconds
LR changed during epoch: 2.03e-04 -> 2.03e-04
total runtime to train this model was 27.506544589996338 seconds
Hyperparameteres for model 0 at epoch 6

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.635493040084839 seconds

Loss: 1.4306

Train Accuracy: 48.03%

Test Accuracy: 50.12%

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Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6656312942504883 seconds

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

total runtime to train this model was 27.595011234283447 seconds

Hyperparameteres for model 1 at epoch 6

lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.433349609375 seconds

Loss: 1.3907

Train Accuracy: 49.44%

Test Accuracy: 50.02%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6443984508514404 seconds

LR changed during epoch: 3.69e-04 -> 3.68e-04

total runtime to train this model was 27.21515703201294 seconds

Hyperparameteres for model 2 at epoch 6

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.517368793487549 seconds

Loss: 1.4120

Train Accuracy: 48.58%

Test Accuracy: 51.24%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.871138095855713 seconds

LR changed during epoch: 3.16e-07 -> 6.22e-05

total runtime to train this model was 27.078376054763794 seconds

Hyperparameteres for model 3 at epoch 6

lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.144599437713623 seconds

Loss: 1.3294

Train Accuracy: 51.98%

Test Accuracy: 53.63%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5826854705810547 seconds

LR changed during epoch: 6.56e-04 -> 6.55e-04

total runtime to train this model was 27.573759078979492 seconds

Hyperparameteres for model 4 at epoch 6

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5073227882385254 seconds

Loss: 1.4084

Train Accuracy: 48.72%

Test Accuracy: 51.59%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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Epoch 6 Summary:

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Time: 159.99s (Avg member: 32.00s)

Population Mean Accuracy: 51.32%

Best Member Accuracy: 53.63%

Mean Batch Size: 256

Mean Learning Rate: 4.00e-04

Mean Weight Decay: 0.081

=====

Epoch 7/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.7249858379364014 seconds
LR changed during epoch: 2.03e-04 -> 2.03e-04
total runtime to train this model was 27.437995195388794 seconds
Hyperparameteres for model 0 at epoch 7
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.423146963119507 seconds
Loss: 1.3663
Train Accuracy: 50.55%
Test Accuracy: 51.28%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7685432434082031 seconds
LR changed during epoch: 4.61e-04 -> 4.60e-04
total runtime to train this model was 28.093589544296265 seconds
Hyperparameteres for model 1 at epoch 7
lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.256335735321045 seconds
Loss: 1.3340
Train Accuracy: 51.83%
Test Accuracy: 51.27%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6621379852294922 seconds
LR changed during epoch: 3.68e-04 -> 3.68e-04
total runtime to train this model was 27.713719129562378 seconds
Hyperparameteres for model 2 at epoch 7
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4498865604400635 seconds

Loss: 1.3498

Train Accuracy: 51.23%

Test Accuracy: 53.02%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6165461540222168 seconds

LR changed during epoch: 6.22e-05 -> 1.24e-04

total runtime to train this model was 27.444775104522705 seconds

Hyperparameteres for model 3 at epoch 7

lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4766712188720703 seconds

Loss: 1.2840

Train Accuracy: 53.63%

Test Accuracy: 53.40%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.8482446670532227 seconds

LR changed during epoch: 6.55e-04 -> 6.54e-04

total runtime to train this model was 27.76480460166931 seconds

Hyperparameteres for model 4 at epoch 7

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.0749707221984863 seconds

Loss: 1.3574

Train Accuracy: 50.58%

Test Accuracy: 51.47%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 7 Summary:

=====

Time: 162.02s (Avg member: 32.40s)

Population Mean Accuracy: 52.09%

Best Member Accuracy: 53.40%

Mean Batch Size: 256

Mean Learning Rate: 4.00e-04

Mean Weight Decay: 0.081

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

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

built data in 1.62027907371521 seconds

LR changed during epoch: 2.03e-04 -> 2.02e-04

total runtime to train this model was 27.68097949028015 seconds

Hyperparameteres for model 0 at epoch 8

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.489885091781616 seconds

Loss: 1.3057

Train Accuracy: 52.91%

Test Accuracy: 54.48%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6463861465454102 seconds

LR changed during epoch: 4.60e-04 -> 4.59e-04

total runtime to train this model was 27.710877180099487 seconds

Hyperparameteres for model 1 at epoch 8

lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5796401500701904 seconds

Loss: 1.2860

Train Accuracy: 53.56%

Test Accuracy: 53.75%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.8250741958618164 seconds

LR changed during epoch: 3.68e-04 -> 3.67e-04

total runtime to train this model was 28.05354142189026 seconds

Hyperparameteres for model 2 at epoch 8

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7254793643951416 seconds

Loss: 1.3025

Train Accuracy: 53.04%

Test Accuracy: 55.26%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.61124587059021 seconds

LR changed during epoch: 1.24e-04 -> 1.86e-04

total runtime to train this model was 27.465238332748413 seconds

Hyperparameteres for model 3 at epoch 8

lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.514880895614624 seconds

Loss: 1.2818

Train Accuracy: 53.61%

Test Accuracy: 52.90%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6393611431121826 seconds

LR changed during epoch: 6.54e-04 -> 6.52e-04

total runtime to train this model was 27.541440963745117 seconds

Hyperparameteres for model 4 at epoch 8

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.813988447189331 seconds

Loss: 1.2954

Train Accuracy: 53.00%

Test Accuracy: 53.77%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 8 Summary:

=====

Time: 161.25s (Avg member: 32.25s)

Population Mean Accuracy: 54.03%

Best Member Accuracy: 55.26%

Mean Batch Size: 256

Mean Learning Rate: 4.00e-04

Mean Weight Decay: 0.081

=====

Epoch 9/70

=====

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

built data in 1.7838561534881592 seconds

LR changed during epoch: 2.02e-04 -> 2.01e-04

total runtime to train this model was 27.21489977836609 seconds

Hyperparameteres for model 0 at epoch 9

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.939164638519287 seconds

Loss: 1.2637

Train Accuracy: 54.23%

Test Accuracy: 54.90%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6248397827148438 seconds

LR changed during epoch: 4.59e-04 -> 4.57e-04

total runtime to train this model was 27.387824296951294 seconds

Hyperparameteres for model 1 at epoch 9

lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.433835983276367 seconds

Loss: 1.2460

Train Accuracy: 54.95%

Test Accuracy: 54.44%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.5942609310150146 seconds

LR changed during epoch: 3.67e-04 -> 3.65e-04

total runtime to train this model was 27.100523471832275 seconds

Hyperparameteres for model 2 at epoch 9

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761
drop_path: 0.1489949794222247
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4475457668304443 seconds
Loss: 1.2579
Train Accuracy: 54.79%
Test Accuracy: 55.29%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8660752773284912 seconds
LR changed during epoch: 1.86e-04 -> 2.48e-04
total runtime to train this model was 26.86311388015747 seconds
Hyperparameteres for model 3 at epoch 9
lr: 0.0003095613189558857

weight_decay: 0.13680183431013873
drop_path: 0.12123592280214976
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.519322156906128 seconds
Loss: 1.2697
Train Accuracy: 54.14%
Test Accuracy: 55.24%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6023914813995361 seconds
LR changed during epoch: 6.52e-04 -> 6.50e-04
total runtime to train this model was 27.271644115447998 seconds
Hyperparameteres for model 4 at epoch 9
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.487143039703369 seconds
Loss: 1.2602
Train Accuracy: 54.61%
Test Accuracy: 55.75%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

Time: 159.35s (Avg member: 31.87s)
Population Mean Accuracy: 55.12%
Best Member Accuracy: 55.75%
Mean Batch Size: 256
Mean Learning Rate: 4.00e-04
Mean Weight Decay: 0.081

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.6577847003936768 seconds
LR changed during epoch: 2.01e-04 -> 2.00e-04
total runtime to train this model was 27.28945827484131 seconds
Hyperparameteres for model 0 at epoch 10
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4403159618377686 seconds

Loss: 1.2262
Train Accuracy: 55.99%
Test Accuracy: 56.83%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6867194175720215 seconds
LR changed during epoch: 4.57e-04 -> 4.54e-04
total runtime to train this model was 27.612461805343628 seconds
Hyperparameteres for model 1 at epoch 10
lr: 0.0004609842840279877

weight_decay: 0.053233020940526385

drop_path: 0.054070113893302456

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.720465898513794 seconds

Loss: 1.2029
Train Accuracy: 56.73%
Test Accuracy: 55.77%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6102430820465088 seconds
LR changed during epoch: 3.65e-04 -> 3.63e-04
total runtime to train this model was 27.472127199172974 seconds
Hyperparameteres for model 2 at epoch 10
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.468207836151123 seconds

Loss: 1.2185
Train Accuracy: 56.08%
Test Accuracy: 58.04%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6587789058685303 seconds
LR changed during epoch: 2.48e-04 -> 3.10e-04
total runtime to train this model was 27.3853178024292 seconds
Hyperparameteres for model 3 at epoch 10
lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4799864292144775 seconds

Loss: 1.2651
Train Accuracy: 54.24%
Test Accuracy: 56.02%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6769185066223145 seconds
LR changed during epoch: 6.50e-04 -> 6.46e-04
total runtime to train this model was 27.559997081756592 seconds
Hyperparameteres for model 4 at epoch 10
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.7766313552856445 seconds

Loss: 1.2160
Train Accuracy: 56.29%
Test Accuracy: 57.04%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

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

Top performers: [58.04]

Bottom performers: [55.77]

Member 1: lr changed from 0.0004609842840279877 to 0.00045120582236787447

Member 1: weight_decay changed from 0.053233020940526385 to 0.028952974602733206

Member 1: drop_path changed from 0.054070113893302456 to 0.03434175723616792

Member 1 copied from 2

LR=4.51e-04, WD=0.029, DropPath=0.034, Warmup=5 epochs, Batch=256

=====

Epoch 10 Summary:

=====

Time: 161.76s (Avg member: 32.35s)

Population Mean Accuracy: 56.74%

Best Member Accuracy: 58.04%

Mean Batch Size: 256

Mean Learning Rate: 3.98e-04

Mean Weight Decay: 0.076

=====

Epoch 11/70

=====

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

built data in 1.6654932498931885 seconds

LR changed during epoch: 2.00e-04 -> 1.99e-04

total runtime to train this model was 27.963073015213013 seconds

Hyperparameteres for model 0 at epoch 11

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5061655044555664 seconds

Loss: 1.1964

Train Accuracy: 56.98%

Test Accuracy: 57.89%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6388700008392334 seconds

LR changed during epoch: 4.60e-07 -> 9.07e-05

total runtime to train this model was 27.438082695007324 seconds

Hyperparameteres for model 1 at epoch 11

lr: 0.00045120582236787447

weight_decay: 0.028952974602733206

drop_path: 0.03434175723616792
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5613605976104736 seconds
Loss: 1.1037
Train Accuracy: 60.67%
Test Accuracy: 60.03%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7811667919158936 seconds
LR changed during epoch: 3.63e-04 -> 3.61e-04
total runtime to train this model was 27.695887565612793 seconds
Hyperparameteres for model 2 at epoch 11
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761
drop_path: 0.1489949794222247
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2216756343841553 seconds
Loss: 1.1815
Train Accuracy: 57.65%
Test Accuracy: 58.68%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6605582237243652 seconds
LR changed during epoch: 3.10e-04 -> 3.09e-04
total runtime to train this model was 27.742204904556274 seconds
Hyperparameteres for model 3 at epoch 11
lr: 0.0003095613189558857

weight_decay: 0.13680183431013873
drop_path: 0.12123592280214976
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.426642656326294 seconds
Loss: 1.2400
Train Accuracy: 54.97%
Test Accuracy: 55.64%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6307644844055176 seconds
LR changed during epoch: 6.46e-04 -> 6.42e-04
total runtime to train this model was 27.82433319091797 seconds
Hyperparameteres for model 4 at epoch 11
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5034453868865967 seconds

Loss: 1.1796

Train Accuracy: 57.54%

Test Accuracy: 58.67%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 11 Summary:

=====

Time: 161.46s (Avg member: 32.29s)

Population Mean Accuracy: 58.18%

Best Member Accuracy: 60.03%

Mean Batch Size: 256

Mean Learning Rate: 3.98e-04

Mean Weight Decay: 0.076

=====

Epoch 12/70

=====

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

built data in 1.754469871520996 seconds

LR changed during epoch: 1.99e-04 -> 1.98e-04

total runtime to train this model was 26.823182821273804 seconds

Hyperparameteres for model 0 at epoch 12

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3687093257904053 seconds

Loss: 1.1624

Train Accuracy: 58.24%

Test Accuracy: 58.99%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.647928237915039 seconds

LR changed during epoch: 9.07e-05 -> 1.81e-04

total runtime to train this model was 27.434569835662842 seconds

Hyperparameteres for model 1 at epoch 12

lr: 0.00045120582236787447

weight_decay: 0.028952974602733206

drop_path: 0.03434175723616792

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4442391395568848 seconds

Loss: 1.0843

Train Accuracy: 61.10%

Test Accuracy: 60.99%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6505165100097656 seconds

LR changed during epoch: 3.61e-04 -> 3.58e-04

total runtime to train this model was 27.316672325134277 seconds

Hyperparameteres for model 2 at epoch 12

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4265546798706055 seconds

Loss: 1.1510

Train Accuracy: 58.72%

Test Accuracy: 60.36%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.7973392009735107 seconds

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

total runtime to train this model was 26.882357358932495 seconds

Hyperparameteres for model 3 at epoch 12

lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.9041507244110107 seconds

Loss: 1.2059

Train Accuracy: 56.67%

Test Accuracy: 57.83%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6314549446105957 seconds
LR changed during epoch: 6.42e-04 -> 6.37e-04
total runtime to train this model was 27.296581268310547 seconds
Hyperparameteres for model 4 at epoch 12
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.560763120651245 seconds
Loss: 1.1315
Train Accuracy: 59.57%
Test Accuracy: 59.83%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 12 Summary:

=====

Time: 160.18s (Avg member: 32.04s)
Population Mean Accuracy: 59.60%
Best Member Accuracy: 60.99%
Mean Batch Size: 256
Mean Learning Rate: 3.98e-04
Mean Weight Decay: 0.076

=====

Epoch 13/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6919372081756592 seconds
LR changed during epoch: 1.98e-04 -> 1.96e-04
total runtime to train this model was 27.18613839149475 seconds
Hyperparameteres for model 0 at epoch 13
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4639923572540283 seconds
Loss: 1.1329
Train Accuracy: 59.31%
Test Accuracy: 60.09%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.5859653949737549 seconds

LR changed during epoch: 1.81e-04 -> 2.71e-04

total runtime to train this model was 27.14916467666626 seconds

Hyperparameteres for model 1 at epoch 13

lr: 0.00045120582236787447

weight_decay: 0.028952974602733206

drop_path: 0.03434175723616792

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.285553455352783 seconds

Loss: 1.0980

Train Accuracy: 60.62%

Test Accuracy: 60.72%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.7142095565795898 seconds

LR changed during epoch: 3.58e-04 -> 3.55e-04

total runtime to train this model was 27.379783630371094 seconds

Hyperparameteres for model 2 at epoch 13

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.453296184539795 seconds

Loss: 1.1196

Train Accuracy: 59.90%

Test Accuracy: 60.37%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.5943777561187744 seconds

LR changed during epoch: 3.09e-04 -> 3.08e-04

total runtime to train this model was 27.03469944000244 seconds

Hyperparameteres for model 3 at epoch 13

lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.487745761871338 seconds
Loss: 1.1736
Train Accuracy: 57.76%
Test Accuracy: 59.19%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6169464588165283 seconds
LR changed during epoch: 6.37e-04 -> 6.32e-04
total runtime to train this model was 27.636207580566406 seconds
Hyperparameteres for model 4 at epoch 13
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.596450090408325 seconds
Loss: 1.0979
Train Accuracy: 60.72%
Test Accuracy: 61.24%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 13 Summary:

=====

Time: 159.17s (Avg member: 31.83s)
Population Mean Accuracy: 60.32%
Best Member Accuracy: 61.24%
Mean Batch Size: 256
Mean Learning Rate: 3.98e-04
Mean Weight Decay: 0.076

=====

Epoch 14/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.8685004711151123 seconds
LR changed during epoch: 1.96e-04 -> 1.94e-04
total runtime to train this model was 27.39543128013611 seconds
Hyperparameteres for model 0 at epoch 14
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.1535804271698 seconds
Loss: 1.1022
Train Accuracy: 60.43%
Test Accuracy: 60.84%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6039717197418213 seconds
LR changed during epoch: 2.71e-04 -> 3.61e-04
total runtime to train this model was 27.531697988510132 seconds
Hyperparameteres for model 1 at epoch 14
lr: 0.00045120582236787447

weight_decay: 0.028952974602733206
drop_path: 0.03434175723616792
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.57370924949646 seconds
Loss: 1.1004
Train Accuracy: 60.77%
Test Accuracy: 60.24%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6157028675079346 seconds
LR changed during epoch: 3.55e-04 -> 3.52e-04
total runtime to train this model was 27.812806129455566 seconds
Hyperparameteres for model 2 at epoch 14
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761
drop_path: 0.1489949794222247
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6267600059509277 seconds
Loss: 1.0907
Train Accuracy: 60.71%
Test Accuracy: 61.69%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8059415817260742 seconds
LR changed during epoch: 3.08e-04 -> 3.07e-04
total runtime to train this model was 27.27544403076172 seconds
Hyperparameteres for model 3 at epoch 14
lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1032233238220215 seconds

Loss: 1.1452

Train Accuracy: 58.85%

Test Accuracy: 60.36%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6521415710449219 seconds

LR changed during epoch: 6.32e-04 -> 6.25e-04

total runtime to train this model was 27.48193383216858 seconds

Hyperparameteres for model 4 at epoch 14

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4844472408294678 seconds

Loss: 1.0559

Train Accuracy: 62.17%

Test Accuracy: 63.17%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 14 Summary:

=====

Time: 161.29s (Avg member: 32.26s)

Population Mean Accuracy: 61.26%

Best Member Accuracy: 63.17%

Mean Batch Size: 256

Mean Learning Rate: 3.98e-04

Mean Weight Decay: 0.076

=====

Epoch 15/70

=====

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

built data in 1.6200177669525146 seconds

LR changed during epoch: 1.94e-04 -> 1.92e-04

total runtime to train this model was 27.354926586151123 seconds

Hyperparameteres for model 0 at epoch 15

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4966161251068115 seconds
Loss: 1.0798
Train Accuracy: 61.23%
Test Accuracy: 61.44%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7906255722045898 seconds
LR changed during epoch: 3.61e-04 -> 4.51e-04
total runtime to train this model was 26.87581181526184 seconds
Hyperparameteres for model 1 at epoch 15
lr: 0.00045120582236787447

weight_decay: 0.028952974602733206
drop_path: 0.03434175723616792

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.42183256149292 seconds
Loss: 1.1029
Train Accuracy: 60.52%
Test Accuracy: 59.92%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.646970510482788 seconds
LR changed during epoch: 3.52e-04 -> 3.48e-04
total runtime to train this model was 27.729608058929443 seconds
Hyperparameteres for model 2 at epoch 15
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761
drop_path: 0.1489949794222247

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4687886238098145 seconds
Loss: 1.0562
Train Accuracy: 62.27%
Test Accuracy: 62.93%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.628706455230713 seconds
LR changed during epoch: 3.07e-04 -> 3.05e-04
total runtime to train this model was 27.592357635498047 seconds

Hyperparameteres for model 3 at epoch 15

lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.53548002243042 seconds

Loss: 1.1070

Train Accuracy: 60.20%

Test Accuracy: 61.03%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6807377338409424 seconds

LR changed during epoch: 6.25e-04 -> 6.18e-04

total runtime to train this model was 27.373047828674316 seconds

Hyperparameteres for model 4 at epoch 15

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.6074607372283936 seconds

Loss: 1.0223

Train Accuracy: 63.80%

Test Accuracy: 64.44%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

==== PBT Exploit & Explore ===

Top performers: [64.44]

Bottom performers: [59.92]

Member 1: lr changed from 0.00045120582236787447 to 0.00038835301155623137

Member 1: weight_decay changed from 0.028952974602733206 to 0.04585650555717065

Member 1: drop_path changed from 0.03434175723616792 to 0.0

Member 1 copied from 4

LR=3.88e-04, WD=0.046, DropPath=0.000, Warmup=5 epochs, Batch=256

=====

Epoch 15 Summary:

=====

Time: 161.04s (Avg member: 32.21s)

Population Mean Accuracy: 61.95%

Best Member Accuracy: 64.44%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.079

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

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

built data in 1.593329668045044 seconds

LR changed during epoch: 1.92e-04 -> 1.89e-04

total runtime to train this model was 27.87984347343445 seconds

Hyperparameteres for model 0 at epoch 16

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5303945541381836 seconds

Loss: 1.0528

Train Accuracy: 62.47%

Test Accuracy: 61.46%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6098313331604004 seconds

LR changed during epoch: 3.96e-07 -> 7.81e-05

total runtime to train this model was 27.561028480529785 seconds

Hyperparameteres for model 1 at epoch 16

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.498891592025757 seconds

Loss: 0.9055

Train Accuracy: 67.93%

Test Accuracy: 67.73%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6841044425964355 seconds

LR changed during epoch: 3.48e-04 -> 3.43e-04

total runtime to train this model was 27.048606872558594 seconds

Hyperparameteres for model 2 at epoch 16

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.7825517654418945 seconds

Loss: 1.0298

Train Accuracy: 63.30%

Test Accuracy: 63.19%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6001033782958984 seconds

LR changed during epoch: 3.05e-04 -> 3.03e-04

total runtime to train this model was 27.57980251312256 seconds

Hyperparameteres for model 3 at epoch 16

lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5541341304779053 seconds

Loss: 1.0784

Train Accuracy: 61.52%

Test Accuracy: 62.15%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5789053440093994 seconds

LR changed during epoch: 6.18e-04 -> 6.11e-04

total runtime to train this model was 27.217676877975464 seconds

Hyperparameteres for model 4 at epoch 16

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.42240571975708 seconds

Loss: 0.9922

Train Accuracy: 64.86%

Test Accuracy: 64.65%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 16 Summary:

=====

Time: 160.45s (Avg member: 32.09s)

Population Mean Accuracy: 63.84%

Best Member Accuracy: 67.73%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.079

=====

Epoch 17/70

=====

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

built data in 1.6213524341583252 seconds

LR changed during epoch: 1.89e-04 -> 1.87e-04

total runtime to train this model was 27.691614389419556 seconds

Hyperparameteres for model 0 at epoch 17

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.4084887504577637 seconds

Loss: 1.0240

Train Accuracy: 63.63%

Test Accuracy: 62.93%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.653543472290039 seconds

LR changed during epoch: 7.81e-05 -> 1.56e-04

total runtime to train this model was 27.264739513397217 seconds

Hyperparameteres for model 1 at epoch 17

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4892594814300537 seconds

Loss: 0.8705

Train Accuracy: 69.16%

Test Accuracy: 68.05%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6012256145477295 seconds

LR changed during epoch: 3.43e-04 -> 3.39e-04

total runtime to train this model was 27.52008056640625 seconds

Hyperparameteres for model 2 at epoch 17

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.514697313308716 seconds

Loss: 1.0006

Train Accuracy: 64.33%

Test Accuracy: 63.29%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.677330493927002 seconds

LR changed during epoch: 3.03e-04 -> 3.01e-04

total runtime to train this model was 27.36766481399536 seconds

Hyperparameteres for model 3 at epoch 17

lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7799742221832275 seconds

Loss: 1.0528

Train Accuracy: 62.39%

Test Accuracy: 62.16%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.7660117149353027 seconds

LR changed during epoch: 6.11e-04 -> 6.02e-04

total runtime to train this model was 26.984862327575684 seconds

Hyperparameteres for model 4 at epoch 17

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7678682804107666 seconds

Loss: 0.9657

Train Accuracy: 65.66%

Test Accuracy: 66.11%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

Time: 160.45s (Avg member: 32.09s)
Population Mean Accuracy: 64.51%
Best Member Accuracy: 68.05%
Mean Batch Size: 256
Mean Learning Rate: 3.85e-04
Mean Weight Decay: 0.079

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.6694211959838867 seconds
LR changed during epoch: 1.87e-04 -> 1.84e-04
total runtime to train this model was 26.791964292526245 seconds
Hyperparameteres for model 0 at epoch 18
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.466106414794922 seconds

Loss: 1.0055
Train Accuracy: 64.33%
Test Accuracy: 64.04%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.615987777709961 seconds

LR changed during epoch: 1.56e-04 -> 2.33e-04
total runtime to train this model was 27.111980438232422 seconds
Hyperparameteres for model 1 at epoch 18
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5423731803894043 seconds

Loss: 0.8667
Train Accuracy: 69.27%
Test Accuracy: 68.00%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.7648444175720215 seconds
LR changed during epoch: 3.39e-04 -> 3.34e-04
total runtime to train this model was 26.354064226150513 seconds
Hyperparameteres for model 2 at epoch 18
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.760340690612793 seconds
Loss: 0.9837
Train Accuracy: 64.85%
Test Accuracy: 65.27%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.637648105621338 seconds
LR changed during epoch: 3.01e-04 -> 2.98e-04
total runtime to train this model was 26.776318073272705 seconds
Hyperparameteres for model 3 at epoch 18
lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.428938150405884 seconds
Loss: 1.0293
Train Accuracy: 63.14%
Test Accuracy: 64.56%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6569468975067139 seconds
LR changed during epoch: 6.02e-04 -> 5.93e-04
total runtime to train this model was 26.895492792129517 seconds
Hyperparameteres for model 4 at epoch 18
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.483255386352539 seconds

Loss: 0.9385
Train Accuracy: 66.77%
Test Accuracy: 66.99%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 18 Summary:

=====

Time: 157.18s (Avg member: 31.44s)
Population Mean Accuracy: 65.77%
Best Member Accuracy: 68.00%
Mean Batch Size: 256
Mean Learning Rate: 3.85e-04
Mean Weight Decay: 0.079

=====

Epoch 19/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5973846912384033 seconds
LR changed during epoch: 1.84e-04 -> 1.81e-04
total runtime to train this model was 26.67178201675415 seconds
Hyperparameteres for model 0 at epoch 19
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.844299793243408 seconds

Loss: 0.9865
Train Accuracy: 65.04%
Test Accuracy: 64.69%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7694954872131348 seconds
LR changed during epoch: 2.33e-04 -> 3.11e-04
total runtime to train this model was 26.668744802474976 seconds
Hyperparameteres for model 1 at epoch 19
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.9445204734802246 seconds

Loss: 0.8690
Train Accuracy: 69.33%

Test Accuracy: 67.60%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6094307899475098 seconds
LR changed during epoch: 3.34e-04 -> 3.28e-04
total runtime to train this model was 26.817981958389282 seconds
Hyperparameteres for model 2 at epoch 19
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.405306577682495 seconds
Loss: 0.9547
Train Accuracy: 66.00%
Test Accuracy: 66.68%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6261909008026123 seconds
LR changed during epoch: 2.98e-04 -> 2.95e-04
total runtime to train this model was 26.82616353034973 seconds
Hyperparameteres for model 3 at epoch 19
lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.432894468307495 seconds
Loss: 1.0021
Train Accuracy: 64.30%
Test Accuracy: 64.70%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6523215770721436 seconds
LR changed during epoch: 5.93e-04 -> 5.84e-04
total runtime to train this model was 26.3361177444458 seconds
Hyperparameteres for model 4 at epoch 19
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6279752254486084 seconds

Loss: 0.9111

Train Accuracy: 67.43%

Test Accuracy: 68.07%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 19 Summary:

=====

Time: 157.12s (Avg member: 31.42s)

Population Mean Accuracy: 66.35%

Best Member Accuracy: 68.07%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.079

=====

Epoch 20/70

=====

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

built data in 1.640618085861206 seconds

LR changed during epoch: 1.81e-04 -> 1.78e-04

total runtime to train this model was 26.85004758834839 seconds

Hyperparameteres for model 0 at epoch 20

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.459655284881592 seconds

Loss: 0.9634

Train Accuracy: 65.91%

Test Accuracy: 65.58%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6780340671539307 seconds

LR changed during epoch: 3.11e-04 -> 3.88e-04

total runtime to train this model was 26.699034690856934 seconds

Hyperparameteres for model 1 at epoch 20

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4780895709991455 seconds

Loss: 0.8748

Train Accuracy: 68.97%

Test Accuracy: 68.06%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6151173114776611 seconds

LR changed during epoch: 3.28e-04 -> 3.22e-04

total runtime to train this model was 26.75233817100525 seconds

Hyperparameteres for model 2 at epoch 20

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5039751529693604 seconds

Loss: 0.9352

Train Accuracy: 66.84%

Test Accuracy: 66.62%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.7177085876464844 seconds

LR changed during epoch: 2.95e-04 -> 2.92e-04

total runtime to train this model was 25.51260757446289 seconds

Hyperparameteres for model 3 at epoch 20

lr: 0.0003095613189558857

weight_decay: 0.13680183431013873

drop_path: 0.12123592280214976

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.635835647583008 seconds

Loss: 0.9692

Train Accuracy: 65.44%

Test Accuracy: 64.54%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.603754997253418 seconds

LR changed during epoch: 5.84e-04 -> 5.73e-04

total runtime to train this model was 26.306254386901855 seconds

Hyperparameteres for model 4 at epoch 20

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3875246047973633 seconds

Loss: 0.8900

Train Accuracy: 68.41%

Test Accuracy: 68.56%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

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

Top performers: [68.56]

Bottom performers: [64.54]

Member 3: lr changed from 0.0003095613189558857 to 0.00019905296708947918

Member 3: weight_decay changed from 0.13680183431013873 to 0.15

Member 3: drop_path changed from 0.12123592280214976 to 0.11388284623645373

Member 3 copied from 4

LR=1.99e-04, WD=0.150, DropPath=0.114, Warmup=5 epochs, Batch=256

=====

Epoch 20 Summary:

=====

Time: 155.12s (Avg member: 31.02s)

Population Mean Accuracy: 66.67%

Best Member Accuracy: 68.56%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.082

=====

Epoch 21/70

=====

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

built data in 1.5792548656463623 seconds

LR changed during epoch: 1.78e-04 -> 1.75e-04

total runtime to train this model was 26.40600848197937 seconds

Hyperparameteres for model 0 at epoch 21

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.418943166732788 seconds

Loss: 0.9379

Train Accuracy: 66.74%

Test Accuracy: 64.88%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.589035987854004 seconds

LR changed during epoch: 3.88e-04 -> 3.88e-04

total runtime to train this model was 26.196876764297485 seconds

Hyperparameteres for model 1 at epoch 21

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.397963762283325 seconds

Loss: 0.8734

Train Accuracy: 69.03%

Test Accuracy: 69.01%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6300928592681885 seconds

LR changed during epoch: 3.22e-04 -> 3.16e-04

total runtime to train this model was 26.707629203796387 seconds

Hyperparameteres for model 2 at epoch 21

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.349216938018799 seconds

Loss: 0.9141

Train Accuracy: 67.47%

Test Accuracy: 67.97%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.650416612625122 seconds

LR changed during epoch: 2.03e-07 -> 4.00e-05

total runtime to train this model was 27.12935757637024 seconds

Hyperparameteres for model 3 at epoch 21

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3511228561401367 seconds
Loss: 0.8112
Train Accuracy: 71.26%
Test Accuracy: 71.60%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.585484266281128 seconds
LR changed during epoch: 5.73e-04 -> 5.63e-04
total runtime to train this model was 27.18664240837097 seconds
Hyperparameteres for model 4 at epoch 21
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4288551807403564 seconds
Loss: 0.8636
Train Accuracy: 69.25%
Test Accuracy: 69.27%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 21 Summary:

=====

Time: 155.84s (Avg member: 31.17s)
Population Mean Accuracy: 68.55%
Best Member Accuracy: 71.60%
Mean Batch Size: 256
Mean Learning Rate: 3.63e-04
Mean Weight Decay: 0.082

=====

Epoch 22/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.607701063156128 seconds
LR changed during epoch: 1.75e-04 -> 1.71e-04
total runtime to train this model was 27.17820167541504 seconds
Hyperparameteres for model 0 at epoch 22
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4970946311950684 seconds

Loss: 0.9251

Train Accuracy: 67.08%

Test Accuracy: 67.13%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.7361047267913818 seconds

LR changed during epoch: 3.88e-04 -> 3.87e-04

total runtime to train this model was 27.09865427017212 seconds

Hyperparameteres for model 1 at epoch 22

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.281005620956421 seconds

Loss: 0.8466

Train Accuracy: 69.89%

Test Accuracy: 69.09%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.608680248260498 seconds

LR changed during epoch: 3.16e-04 -> 3.10e-04

total runtime to train this model was 26.979400157928467 seconds

Hyperparameteres for model 2 at epoch 22

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4737839698791504 seconds

Loss: 0.8849

Train Accuracy: 68.67%

Test Accuracy: 68.52%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6327319145202637 seconds

LR changed during epoch: 4.00e-05 -> 7.98e-05

total runtime to train this model was 26.659318923950195 seconds

Hyperparameteres for model 3 at epoch 22

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.500051975250244 seconds

Loss: 0.7632

Train Accuracy: 72.81%

Test Accuracy: 72.17%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6214337348937988 seconds

LR changed during epoch: 5.63e-04 -> 5.51e-04

total runtime to train this model was 26.48126530647278 seconds

Hyperparameteres for model 4 at epoch 22

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1306567192077637 seconds

Loss: 0.8389

Train Accuracy: 70.12%

Test Accuracy: 70.22%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 22 Summary:

=====

Time: 157.78s (Avg member: 31.56s)

Population Mean Accuracy: 69.43%

Best Member Accuracy: 72.17%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.082

=====

Epoch 23/70

=====

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

built data in 1.7756483554840088 seconds

LR changed during epoch: 1.71e-04 -> 1.67e-04

total runtime to train this model was 26.97465181350708 seconds

Hyperparameteres for model 0 at epoch 23

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7310922145843506 seconds
Loss: 0.9084
Train Accuracy: 67.82%
Test Accuracy: 67.54%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6517198085784912 seconds
LR changed during epoch: 3.87e-04 -> 3.86e-04
total runtime to train this model was 27.82201337814331 seconds
Hyperparameteres for model 1 at epoch 23
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065
drop_path: 0.0

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4824044704437256 seconds
Loss: 0.8279
Train Accuracy: 70.72%
Test Accuracy: 69.63%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.689253330230713 seconds
LR changed during epoch: 3.10e-04 -> 3.03e-04
total runtime to train this model was 27.38428831100464 seconds
Hyperparameteres for model 2 at epoch 23
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761
drop_path: 0.1489949794222247

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6730902194976807 seconds
Loss: 0.8712
Train Accuracy: 69.15%
Test Accuracy: 68.78%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.843168020248413 seconds
LR changed during epoch: 7.98e-05 -> 1.20e-04
total runtime to train this model was 27.793949127197266 seconds

Hyperparameteres for model 3 at epoch 23

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.7374074459075928 seconds

Loss: 0.7543

Train Accuracy: 73.30%

Test Accuracy: 72.35%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6084260940551758 seconds

LR changed during epoch: 5.51e-04 -> 5.39e-04

total runtime to train this model was 27.094409465789795 seconds

Hyperparameteres for model 4 at epoch 23

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.527883291244507 seconds

Loss: 0.8170

Train Accuracy: 70.96%

Test Accuracy: 70.20%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 23 Summary:

=====

Time: 160.04s (Avg member: 32.01s)

Population Mean Accuracy: 69.70%

Best Member Accuracy: 72.35%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.082

=====

Epoch 24/70

=====

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

built data in 1.5873262882232666 seconds

LR changed during epoch: 1.67e-04 -> 1.64e-04

total runtime to train this model was 27.071555137634277 seconds

Hyperparameteres for model 0 at epoch 24

lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4857728481292725 seconds

Loss: 0.8900

Train Accuracy: 68.37%

Test Accuracy: 67.54%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6888198852539062 seconds

LR changed during epoch: 3.86e-04 -> 3.85e-04

total runtime to train this model was 26.936649084091187 seconds

Hyperparameteres for model 1 at epoch 24

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.394643783569336 seconds

Loss: 0.8137

Train Accuracy: 71.11%

Test Accuracy: 70.11%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.61244535446167 seconds

LR changed during epoch: 3.03e-04 -> 2.96e-04

total runtime to train this model was 27.369388103485107 seconds

Hyperparameteres for model 2 at epoch 24

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4411003589630127 seconds

Loss: 0.8449

Train Accuracy: 70.04%

Test Accuracy: 68.91%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6304810047149658 seconds
LR changed during epoch: 1.20e-04 -> 1.59e-04
total runtime to train this model was 27.146398544311523 seconds
Hyperparameteres for model 3 at epoch 24
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4831604957580566 seconds

Loss: 0.7390
Train Accuracy: 74.01%
Test Accuracy: 72.68%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6158368587493896 seconds
LR changed during epoch: 5.39e-04 -> 5.27e-04
total runtime to train this model was 26.688581228256226 seconds
Hyperparameteres for model 4 at epoch 24
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.087536334991455 seconds

Loss: 0.8005
Train Accuracy: 71.73%
Test Accuracy: 71.08%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 24 Summary:

=====

Time: 158.47s (Avg member: 31.69s)
Population Mean Accuracy: 70.06%
Best Member Accuracy: 72.68%
Mean Batch Size: 256
Mean Learning Rate: 3.63e-04
Mean Weight Decay: 0.082

=====

Epoch 25/70

=====

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

built data in 1.7685766220092773 seconds
LR changed during epoch: 1.64e-04 -> 1.60e-04
total runtime to train this model was 26.4412522315979 seconds
Hyperparameteres for model 0 at epoch 25
lr: 0.00020338837091595405

weight_decay: 0.13854052927773935

drop_path: 0.046587888362644894

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.86609148979187 seconds

Loss: 0.8759
Train Accuracy: 68.71%
Test Accuracy: 68.49%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.603031873703003 seconds
LR changed during epoch: 3.85e-04 -> 3.83e-04
total runtime to train this model was 26.84090280532837 seconds
Hyperparameteres for model 1 at epoch 25
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.466737985610962 seconds

Loss: 0.7960
Train Accuracy: 71.87%
Test Accuracy: 70.85%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.5939075946807861 seconds
LR changed during epoch: 2.96e-04 -> 2.89e-04
total runtime to train this model was 26.729830503463745 seconds
Hyperparameteres for model 2 at epoch 25
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.546785593032837 seconds

Loss: 0.8341
Train Accuracy: 70.25%
Test Accuracy: 70.44%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.615863561630249 seconds
LR changed during epoch: 1.59e-04 -> 1.99e-04
total runtime to train this model was 26.66615104675293 seconds
Hyperparameters for model 3 at epoch 25
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.415421485900879 seconds
Loss: 0.7407
Train Accuracy: 73.72%
Test Accuracy: 73.18%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6579949855804443 seconds
LR changed during epoch: 5.27e-04 -> 5.14e-04
total runtime to train this model was 26.85177969932556 seconds
Hyperparameters for model 4 at epoch 25
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.475853204727173 seconds
Loss: 0.7736
Train Accuracy: 72.61%
Test Accuracy: 72.40%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

==== PBT Exploit & Explore ====
Top performers: [73.18]
Bottom performers: [68.49]
Member 0: lr changed from 0.00020338837091595405 to 0.00029467348637804235
Member 0: weight_decay changed from 0.13854052927773935 to 0.14616488078881165
Member 0: drop_path changed from 0.046587888362644894 to 0.058997494935070866
Member 0 copied from 3
LR=2.95e-04, WD=0.146, DropPath=0.059, Warmup=5 epochs, Batch=256

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

Time: 156.83s (Avg member: 31.36s)
Population Mean Accuracy: 71.07%
Best Member Accuracy: 73.18%
Mean Batch Size: 256
Mean Learning Rate: 3.81e-04
Mean Weight Decay: 0.084

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.5846869945526123 seconds
LR changed during epoch: 3.01e-07 -> 5.92e-05
total runtime to train this model was 26.77183175086975 seconds
Hyperparameteres for model 0 at epoch 26
lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4294965267181396 seconds

Loss: 0.6782
Train Accuracy: 75.91%
Test Accuracy: 73.64%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5801098346710205 seconds
LR changed during epoch: 3.83e-04 -> 3.80e-04
total runtime to train this model was 26.784116506576538 seconds
Hyperparameteres for model 1 at epoch 26
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4259085655212402 seconds

Loss: 0.7746
Train Accuracy: 72.57%
Test Accuracy: 71.49%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.8060543537139893 seconds
LR changed during epoch: 2.89e-04 -> 2.82e-04
total runtime to train this model was 26.553641319274902 seconds
Hyperparameteres for model 2 at epoch 26
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.253915786743164 seconds

Loss: 0.8164
Train Accuracy: 71.14%
Test Accuracy: 70.88%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6016404628753662 seconds
LR changed during epoch: 1.99e-04 -> 1.99e-04
total runtime to train this model was 26.887730836868286 seconds
Hyperparameteres for model 3 at epoch 26
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.380581855773926 seconds

Loss: 0.7322
Train Accuracy: 74.01%
Test Accuracy: 72.32%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6037883758544922 seconds
LR changed during epoch: 5.14e-04 -> 5.01e-04
total runtime to train this model was 26.689969778060913 seconds
Hyperparameteres for model 4 at epoch 26
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.497138500213623 seconds

Loss: 0.7527
Train Accuracy: 73.41%
Test Accuracy: 72.70%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 26 Summary:

=====

Time: 156.08s (Avg member: 31.22s)
Population Mean Accuracy: 72.21%
Best Member Accuracy: 73.64%
Mean Batch Size: 256
Mean Learning Rate: 3.81e-04
Mean Weight Decay: 0.084

=====

Epoch 27/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5916783809661865 seconds
LR changed during epoch: 5.92e-05 -> 1.18e-04
total runtime to train this model was 26.74147391319275 seconds
Hyperparameteres for model 0 at epoch 27
lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6633248329162598 seconds

Loss: 0.6712
Train Accuracy: 76.36%
Test Accuracy: 73.78%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.8331773281097412 seconds
LR changed during epoch: 3.80e-04 -> 3.77e-04
total runtime to train this model was 26.186367988586426 seconds
Hyperparameteres for model 1 at epoch 27
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.9644296169281006 seconds

Loss: 0.7598
Train Accuracy: 73.09%

Test Accuracy: 71.80%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.581106424331665 seconds
LR changed during epoch: 2.82e-04 -> 2.74e-04
total runtime to train this model was 26.570127964019775 seconds
Hyperparameteres for model 2 at epoch 27
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761
drop_path: 0.1489949794222247
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4560256004333496 seconds
Loss: 0.7907
Train Accuracy: 71.80%
Test Accuracy: 70.65%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7156291007995605 seconds
LR changed during epoch: 1.99e-04 -> 1.99e-04
total runtime to train this model was 26.714423894882202 seconds
Hyperparameteres for model 3 at epoch 27
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4765825271606445 seconds
Loss: 0.7180
Train Accuracy: 74.85%
Test Accuracy: 73.50%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.602630853652954 seconds
LR changed during epoch: 5.01e-04 -> 4.87e-04
total runtime to train this model was 26.915738821029663 seconds
Hyperparameteres for model 4 at epoch 27
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588
warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.600295305252075 seconds

Loss: 0.7312

Train Accuracy: 73.97%

Test Accuracy: 71.56%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 27 Summary:

=====

Time: 155.96s (Avg member: 31.19s)

Population Mean Accuracy: 72.26%

Best Member Accuracy: 73.78%

Mean Batch Size: 256

Mean Learning Rate: 3.81e-04

Mean Weight Decay: 0.084

=====

Epoch 28/70

=====

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

built data in 1.8727984428405762 seconds

LR changed during epoch: 1.18e-04 -> 1.77e-04

total runtime to train this model was 27.45547342300415 seconds

Hyperparameteres for model 0 at epoch 28

lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8028640747070312 seconds

Loss: 0.6797

Train Accuracy: 75.79%

Test Accuracy: 73.07%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6089797019958496 seconds

LR changed during epoch: 3.77e-04 -> 3.74e-04

total runtime to train this model was 27.861762046813965 seconds

Hyperparameteres for model 1 at epoch 28

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5361735820770264 seconds
Loss: 0.7424
Train Accuracy: 73.84%
Test Accuracy: 71.89%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6449341773986816 seconds
LR changed during epoch: 2.74e-04 -> 2.66e-04
total runtime to train this model was 27.757689952850342 seconds
Hyperparameteres for model 2 at epoch 28
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.587376594543457 seconds
Loss: 0.7767
Train Accuracy: 72.31%
Test Accuracy: 71.41%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8405203819274902 seconds
LR changed during epoch: 1.99e-04 -> 1.98e-04
total runtime to train this model was 26.659494876861572 seconds
Hyperparameteres for model 3 at epoch 28
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.517631769180298 seconds
Loss: 0.7068
Train Accuracy: 74.85%
Test Accuracy: 73.10%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.7668609619140625 seconds
LR changed during epoch: 4.87e-04 -> 4.73e-04
total runtime to train this model was 26.934161901474 seconds
Hyperparameteres for model 4 at epoch 28
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.422757863998413 seconds

Loss: 0.7190

Train Accuracy: 74.32%

Test Accuracy: 73.14%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

Time: 160.50s (Avg member: 32.10s)

Population Mean Accuracy: 72.52%

Best Member Accuracy: 73.14%

Mean Batch Size: 256

Mean Learning Rate: 3.81e-04

Mean Weight Decay: 0.084

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

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

built data in 1.5925829410552979 seconds

LR changed during epoch: 1.77e-04 -> 2.36e-04

total runtime to train this model was 27.25363302230835 seconds

Hyperparameteres for model 0 at epoch 29

lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.425530433654785 seconds

Loss: 0.6868

Train Accuracy: 75.58%

Test Accuracy: 73.26%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6383991241455078 seconds

LR changed during epoch: 3.74e-04 -> 3.70e-04

total runtime to train this model was 27.574113130569458 seconds

Hyperparameteres for model 1 at epoch 29

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.7000348567962646 seconds
Loss: 0.7221
Train Accuracy: 74.45%
Test Accuracy: 72.42%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6165995597839355 seconds
LR changed during epoch: 2.66e-04 -> 2.58e-04
total runtime to train this model was 27.466049909591675 seconds
Hyperparameteres for model 2 at epoch 29
lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.432948112487793 seconds
Loss: 0.7616
Train Accuracy: 72.87%
Test Accuracy: 71.11%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6371643543243408 seconds
LR changed during epoch: 1.98e-04 -> 1.97e-04
total runtime to train this model was 26.865033626556396 seconds
Hyperparameteres for model 3 at epoch 29
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.435410499572754 seconds
Loss: 0.6992
Train Accuracy: 75.18%
Test Accuracy: 73.60%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6460258960723877 seconds

LR changed during epoch: 4.73e-04 -> 4.59e-04
total runtime to train this model was 26.921905279159546 seconds
Hyperparameteres for model 4 at epoch 29
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0260016918182373 seconds

Loss: 0.6956
Train Accuracy: 75.04%
Test Accuracy: 73.81%
Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 29 Summary:

=====
Time: 159.51s (Avg member: 31.90s)
Population Mean Accuracy: 72.84%
Best Member Accuracy: 73.81%
Mean Batch Size: 256
Mean Learning Rate: 3.81e-04
Mean Weight Decay: 0.084

=====

Epoch 30/70

=====
--- Training Member 0 (Batch size: 256) ---
built data in 1.9561223983764648 seconds
LR changed during epoch: 2.36e-04 -> 2.95e-04
total runtime to train this model was 26.52159571647644 seconds
Hyperparameteres for model 0 at epoch 30
lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.607612133026123 seconds

Loss: 0.7002
Train Accuracy: 75.19%
Test Accuracy: 72.80%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.592987298965454 seconds

LR changed during epoch: 3.70e-04 -> 3.66e-04

total runtime to train this model was 27.003075122833252 seconds

Hyperparameteres for model 1 at epoch 30

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5122032165527344 seconds

Loss: 0.7044

Train Accuracy: 74.95%

Test Accuracy: 73.52%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6088743209838867 seconds

LR changed during epoch: 2.58e-04 -> 2.50e-04

total runtime to train this model was 26.721832513809204 seconds

Hyperparameteres for model 2 at epoch 30

lr: 0.0003686773606297418

weight_decay: 0.04216712649629761

drop_path: 0.1489949794222247

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4032793045043945 seconds

Loss: 0.7418

Train Accuracy: 73.70%

Test Accuracy: 72.33%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6597344875335693 seconds

LR changed during epoch: 1.97e-04 -> 1.96e-04

total runtime to train this model was 26.693772792816162 seconds

Hyperparameteres for model 3 at epoch 30

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.6665167808532715 seconds

Loss: 0.6834

Train Accuracy: 75.84%

Test Accuracy: 73.40%

Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6934351921081543 seconds
LR changed during epoch: 4.59e-04 -> 4.44e-04
total runtime to train this model was 26.67038893699646 seconds
Hyperparameteres for model 4 at epoch 30
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4106197357177734 seconds
Loss: 0.6787
Train Accuracy: 75.93%
Test Accuracy: 74.84%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

==== PBT Exploit & Explore ====
Top performers: [74.84]
Bottom performers: [72.33]
Member 2: lr changed from 0.0003686773606297418 to 0.00042123243526480484
Member 2: weight_decay changed from 0.04216712649629761 to 0.02887100536714983
Member 2: drop_path changed from 0.1489949794222247 to 0.16134746188805799
Member 2 copied from 4
LR=4.21e-04, WD=0.029, DropPath=0.161, Warmup=5 epochs, Batch=256

=====
Epoch 30 Summary:
=====

Time: 156.96s (Avg member: 31.39s)
Population Mean Accuracy: 73.38%
Best Member Accuracy: 74.84%
Mean Batch Size: 256
Mean Learning Rate: 3.92e-04
Mean Weight Decay: 0.081

=====
Epoch 31/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6157772541046143 seconds
LR changed during epoch: 2.95e-04 -> 2.95e-04
total runtime to train this model was 26.862996339797974 seconds
Hyperparameteres for model 0 at epoch 31
lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.437857151031494 seconds
Loss: 0.7023
Train Accuracy: 75.07%
Test Accuracy: 73.77%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6818909645080566 seconds
LR changed during epoch: 3.66e-04 -> 3.62e-04
total runtime to train this model was 26.793484926223755 seconds
Hyperparameteres for model 1 at epoch 31
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065
drop_path: 0.0

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7758212089538574 seconds
Loss: 0.6939
Train Accuracy: 75.49%
Test Accuracy: 73.58%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7267258167266846 seconds
LR changed during epoch: 4.30e-07 -> 8.47e-05
total runtime to train this model was 26.356159210205078 seconds
Hyperparameteres for model 2 at epoch 31
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983
drop_path: 0.16134746188805799

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0535812377929688 seconds
Loss: 0.6020
Train Accuracy: 78.73%
Test Accuracy: 76.26%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.653214693069458 seconds
LR changed during epoch: 1.96e-04 -> 1.95e-04
total runtime to train this model was 26.594110012054443 seconds

Hyperparameteres for model 3 at epoch 31

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.795320987701416 seconds

Loss: 0.6758

Train Accuracy: 76.10%

Test Accuracy: 74.77%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5929129123687744 seconds

LR changed during epoch: 4.44e-04 -> 4.29e-04

total runtime to train this model was 27.46757221221924 seconds

Hyperparameteres for model 4 at epoch 31

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.862675428390503 seconds

Loss: 0.6521

Train Accuracy: 76.86%

Test Accuracy: 74.62%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 31 Summary:

=====

Time: 157.53s (Avg member: 31.51s)

Population Mean Accuracy: 74.60%

Best Member Accuracy: 76.26%

Mean Batch Size: 256

Mean Learning Rate: 3.92e-04

Mean Weight Decay: 0.081

=====

Epoch 32/70

=====

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

built data in 1.7435357570648193 seconds

LR changed during epoch: 2.95e-04 -> 2.94e-04

total runtime to train this model was 26.618616819381714 seconds

Hyperparameteres for model 0 at epoch 32

lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 4.18423867225647 seconds

Loss: 0.6866

Train Accuracy: 75.68%

Test Accuracy: 73.75%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6024246215820312 seconds

LR changed during epoch: 3.62e-04 -> 3.57e-04

total runtime to train this model was 27.525877475738525 seconds

Hyperparameteres for model 1 at epoch 32

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8891680240631104 seconds

Loss: 0.6733

Train Accuracy: 75.99%

Test Accuracy: 72.42%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6817424297332764 seconds

LR changed during epoch: 8.47e-05 -> 1.69e-04

total runtime to train this model was 26.76944065093994 seconds

Hyperparameteres for model 2 at epoch 32

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4374446868896484 seconds

Loss: 0.5778

Train Accuracy: 79.36%

Test Accuracy: 76.74%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6488666534423828 seconds
LR changed during epoch: 1.95e-04 -> 1.93e-04
total runtime to train this model was 26.84712553024292 seconds
Hyperparameteres for model 3 at epoch 32
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3963537216186523 seconds

Loss: 0.6630
Train Accuracy: 76.47%
Test Accuracy: 74.71%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.7037973403930664 seconds
LR changed during epoch: 4.29e-04 -> 4.14e-04
total runtime to train this model was 26.798638105392456 seconds
Hyperparameteres for model 4 at epoch 32
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5017623901367188 seconds

Loss: 0.6410
Train Accuracy: 77.23%
Test Accuracy: 74.68%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 32 Summary:

=====

Time: 159.85s (Avg member: 31.97s)
Population Mean Accuracy: 74.46%
Best Member Accuracy: 76.74%
Mean Batch Size: 256
Mean Learning Rate: 3.92e-04
Mean Weight Decay: 0.081

=====

Epoch 33/70

=====

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

built data in 1.595564365386963 seconds
LR changed during epoch: 2.94e-04 -> 2.93e-04
total runtime to train this model was 26.859397411346436 seconds
Hyperparameteres for model 0 at epoch 33
lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.521192789077759 seconds

Loss: 0.6727
Train Accuracy: 76.18%
Test Accuracy: 74.12%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.620539665222168 seconds
LR changed during epoch: 3.57e-04 -> 3.51e-04
total runtime to train this model was 26.54050064086914 seconds
Hyperparameteres for model 1 at epoch 33
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.526824474334717 seconds

Loss: 0.6581
Train Accuracy: 76.55%
Test Accuracy: 73.48%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.8160536289215088 seconds
LR changed during epoch: 1.69e-04 -> 2.53e-04
total runtime to train this model was 26.85746431350708 seconds
Hyperparameteres for model 2 at epoch 33
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5631375312805176 seconds

Loss: 0.5803
Train Accuracy: 79.55%
Test Accuracy: 76.35%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6337006092071533 seconds
LR changed during epoch: 1.93e-04 -> 1.92e-04
total runtime to train this model was 27.123259782791138 seconds
Hyperparameters for model 3 at epoch 33
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6415085792541504 seconds
Loss: 0.6529
Train Accuracy: 76.87%
Test Accuracy: 74.83%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6585538387298584 seconds
LR changed during epoch: 4.14e-04 -> 3.99e-04
total runtime to train this model was 27.227720975875854 seconds
Hyperparameters for model 4 at epoch 33
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5245187282562256 seconds
Loss: 0.6244
Train Accuracy: 77.76%
Test Accuracy: 75.22%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 33 Summary:

=====

Time: 157.91s (Avg member: 31.58s)
Population Mean Accuracy: 74.80%
Best Member Accuracy: 76.35%
Mean Batch Size: 256
Mean Learning Rate: 3.92e-04
Mean Weight Decay: 0.081

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.6452133655548096 seconds
LR changed during epoch: 2.93e-04 -> 2.92e-04
total runtime to train this model was 26.707130908966064 seconds
Hyperparameteres for model 0 at epoch 34
lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4366626739501953 seconds

Loss: 0.6635
Train Accuracy: 76.79%
Test Accuracy: 72.93%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.7822654247283936 seconds
LR changed during epoch: 3.51e-04 -> 3.46e-04
total runtime to train this model was 26.951209545135498 seconds
Hyperparameteres for model 1 at epoch 34
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.483572006225586 seconds

Loss: 0.6412
Train Accuracy: 77.16%
Test Accuracy: 74.29%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.629241704940796 seconds
LR changed during epoch: 2.53e-04 -> 3.37e-04
total runtime to train this model was 26.982390642166138 seconds
Hyperparameteres for model 2 at epoch 34
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.490466356277466 seconds

Loss: 0.5923

Train Accuracy: 78.88%

Test Accuracy: 75.59%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6444942951202393 seconds

LR changed during epoch: 1.92e-04 -> 1.90e-04

total runtime to train this model was 26.936168432235718 seconds

Hyperparameteres for model 3 at epoch 34

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5044102668762207 seconds

Loss: 0.6417

Train Accuracy: 77.19%

Test Accuracy: 74.69%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.7801666259765625 seconds

LR changed during epoch: 3.99e-04 -> 3.83e-04

total runtime to train this model was 26.608118295669556 seconds

Hyperparameteres for model 4 at epoch 34

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2735564708709717 seconds

Loss: 0.6005

Train Accuracy: 78.74%

Test Accuracy: 75.30%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 34 Summary:

=====

Time: 158.16s (Avg member: 31.63s)

Population Mean Accuracy: 74.56%

Best Member Accuracy: 75.59%

Mean Batch Size: 256

Mean Learning Rate: 3.92e-04

Mean Weight Decay: 0.081

=====

Epoch 35/70

=====

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

built data in 1.6815414428710938 seconds

LR changed during epoch: 2.92e-04 -> 2.90e-04

total runtime to train this model was 27.063196182250977 seconds

Hyperparameteres for model 0 at epoch 35

lr: 0.00029467348637804235

weight_decay: 0.14616488078881165

drop_path: 0.058997494935070866

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.487110137939453 seconds

Loss: 0.6540

Train Accuracy: 77.02%

Test Accuracy: 73.61%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.5824148654937744 seconds

LR changed during epoch: 3.46e-04 -> 3.40e-04

total runtime to train this model was 27.198676109313965 seconds

Hyperparameteres for model 1 at epoch 35

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5627660751342773 seconds

Loss: 0.6255

Train Accuracy: 77.73%

Test Accuracy: 74.88%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.726618766784668 seconds

LR changed during epoch: 3.37e-04 -> 4.21e-04

total runtime to train this model was 26.8006751537323 seconds

Hyperparameteres for model 2 at epoch 35

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.755862236022949 seconds

Loss: 0.6077

Train Accuracy: 78.38%

Test Accuracy: 75.50%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.590423583984375 seconds

LR changed during epoch: 1.90e-04 -> 1.88e-04

total runtime to train this model was 27.176351308822632 seconds

Hyperparameteres for model 3 at epoch 35

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5718111991882324 seconds

Loss: 0.6328

Train Accuracy: 77.57%

Test Accuracy: 75.19%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.656543254852295 seconds

LR changed during epoch: 3.83e-04 -> 3.68e-04

total runtime to train this model was 27.46470022201538 seconds

Hyperparameteres for model 4 at epoch 35

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.564480781555176 seconds

Loss: 0.5800

Train Accuracy: 79.18%

Test Accuracy: 75.03%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

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

Top performers: [75.5]

Bottom performers: [73.61]

Member 0: lr changed from 0.00029467348637804235 to 0.0004100922132870585

Member 0: weight_decay changed from 0.14616488078881165 to 0.15

Member 0: drop_path changed from 0.058997494935070866 to 0.035977724149078544

Member 0 copied from 2

LR=4.10e-04, WD=0.150, DropPath=0.036, Warmup=5 epochs, Batch=256

=====
Epoch 35 Summary:
=====

Time: 159.13s (Avg member: 31.82s)

Population Mean Accuracy: 74.84%

Best Member Accuracy: 75.50%

Mean Batch Size: 256

Mean Learning Rate: 4.15e-04

Mean Weight Decay: 0.082

=====
Epoch 36/70
=====

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

built data in 1.709427833557129 seconds

LR changed during epoch: 4.18e-07 -> 8.24e-05

total runtime to train this model was 27.403160095214844 seconds

Hyperparameteres for model 0 at epoch 36

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.865997791290283 seconds

Loss: 0.5203

Train Accuracy: 81.65%

Test Accuracy: 77.20%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6970255374908447 seconds

LR changed during epoch: 3.40e-04 -> 3.33e-04

total runtime to train this model was 27.639625787734985 seconds

Hyperparameteres for model 1 at epoch 36

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.516599178314209 seconds

Loss: 0.6060

Train Accuracy: 78.51%

Test Accuracy: 74.83%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6025745868682861 seconds

LR changed during epoch: 4.21e-04 -> 4.21e-04

total runtime to train this model was 27.149662733078003 seconds

Hyperparameteres for model 2 at epoch 36

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5991249084472656 seconds

Loss: 0.6221

Train Accuracy: 77.82%

Test Accuracy: 74.97%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6892001628875732 seconds

LR changed during epoch: 1.88e-04 -> 1.85e-04

total runtime to train this model was 26.750474214553833 seconds

Hyperparameteres for model 3 at epoch 36

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.3669703006744385 seconds

Loss: 0.6222

Train Accuracy: 78.05%

Test Accuracy: 75.55%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6896827220916748 seconds

LR changed during epoch: 3.68e-04 -> 3.52e-04

total runtime to train this model was 27.40018057823181 seconds

Hyperparameteres for model 4 at epoch 36

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5176873207092285 seconds

Loss: 0.5637

Train Accuracy: 79.89%

Test Accuracy: 76.66%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====
Epoch 36 Summary:
=====

Time: 160.85s (Avg member: 32.17s)

Population Mean Accuracy: 75.84%

Best Member Accuracy: 77.20%

Mean Batch Size: 256

Mean Learning Rate: 4.15e-04

Mean Weight Decay: 0.082

=====
Epoch 37/70
=====

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

built data in 1.6426708698272705 seconds

LR changed during epoch: 8.24e-05 -> 1.64e-04

total runtime to train this model was 26.80015230178833 seconds

Hyperparameteres for model 0 at epoch 37

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4606006145477295 seconds

Loss: 0.4928

Train Accuracy: 82.47%

Test Accuracy: 77.16%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.591198444366455 seconds

LR changed during epoch: 3.33e-04 -> 3.27e-04

total runtime to train this model was 27.166810750961304 seconds

Hyperparameteres for model 1 at epoch 37

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.531510829925537 seconds
Loss: 0.5864
Train Accuracy: 79.22%
Test Accuracy: 75.54%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.849078893661499 seconds
LR changed during epoch: 4.21e-04 -> 4.20e-04
total runtime to train this model was 26.978753566741943 seconds
Hyperparameteres for model 2 at epoch 37
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1564738750457764 seconds
Loss: 0.6102
Train Accuracy: 78.33%
Test Accuracy: 74.98%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.587552785873413 seconds
LR changed during epoch: 1.85e-04 -> 1.83e-04
total runtime to train this model was 27.38627529144287 seconds
Hyperparameteres for model 3 at epoch 37
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5554261207580566 seconds
Loss: 0.6138
Train Accuracy: 78.23%
Test Accuracy: 76.08%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.7038531303405762 seconds

LR changed during epoch: 3.52e-04 -> 3.36e-04
total runtime to train this model was 26.75401282310486 seconds
Hyperparameteres for model 4 at epoch 37
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4632933139801025 seconds

Loss: 0.5451
Train Accuracy: 80.78%
Test Accuracy: 75.91%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 37 Summary:

=====
Time: 157.89s (Avg member: 31.58s)
Population Mean Accuracy: 75.93%
Best Member Accuracy: 77.16%
Mean Batch Size: 256
Mean Learning Rate: 4.15e-04
Mean Weight Decay: 0.082

=====

Epoch 38/70

=====
--- Training Member 0 (Batch size: 256) ---
built data in 1.7020509243011475 seconds
LR changed during epoch: 1.64e-04 -> 2.46e-04
total runtime to train this model was 26.850470304489136 seconds
Hyperparameteres for model 0 at epoch 38
lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.652733325958252 seconds

Loss: 0.4994
Train Accuracy: 82.25%
Test Accuracy: 77.08%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.7110090255737305 seconds

LR changed during epoch: 3.27e-04 -> 3.20e-04
total runtime to train this model was 27.432260036468506 seconds

Hyperparameteres for model 1 at epoch 38

lr: 0.00038835301155623137

weight_decay: 0.04585650555717065

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5324366092681885 seconds

Loss: 0.5775

Train Accuracy: 79.38%

Test Accuracy: 75.68%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.58394455909729 seconds

LR changed during epoch: 4.20e-04 -> 4.19e-04

total runtime to train this model was 27.24414825439453 seconds

Hyperparameteres for model 2 at epoch 38

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4904837608337402 seconds

Loss: 0.6000

Train Accuracy: 78.49%

Test Accuracy: 76.33%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6515262126922607 seconds

LR changed during epoch: 1.83e-04 -> 1.80e-04

total runtime to train this model was 27.088865518569946 seconds

Hyperparameteres for model 3 at epoch 38

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.2280702590942383 seconds

Loss: 0.6062

Train Accuracy: 78.48%

Test Accuracy: 75.66%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.7445056438446045 seconds

LR changed during epoch: 3.36e-04 -> 3.20e-04

total runtime to train this model was 27.14527130126953 seconds

Hyperparameteres for model 4 at epoch 38

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.472365379333496 seconds

Loss: 0.5281

Train Accuracy: 81.31%

Test Accuracy: 76.37%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 38 Summary:

=====

Time: 159.85s (Avg member: 31.97s)

Population Mean Accuracy: 76.22%

Best Member Accuracy: 77.08%

Mean Batch Size: 256

Mean Learning Rate: 4.15e-04

Mean Weight Decay: 0.082

=====

Epoch 39/70

=====

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

built data in 1.6431925296783447 seconds

LR changed during epoch: 2.46e-04 -> 3.28e-04

total runtime to train this model was 27.10540008544922 seconds

Hyperparameteres for model 0 at epoch 39

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.471909523010254 seconds

Loss: 0.5242

Train Accuracy: 81.30%

Test Accuracy: 76.92%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

```
--- Training Member 1 (Batch size: 256) ---
built data in 1.603278636932373 seconds
LR changed during epoch: 3.20e-04 -> 3.12e-04
total runtime to train this model was 26.936816453933716 seconds
Hyperparameteres for model 1 at epoch 39
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065
drop_path: 0.0
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.572070598602295 seconds
Loss: 0.5567
Train Accuracy: 80.14%
Test Accuracy: 75.62%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7856419086456299 seconds
LR changed during epoch: 4.19e-04 -> 4.17e-04
total runtime to train this model was 26.72553253173828 seconds
Hyperparameteres for model 2 at epoch 39
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983
drop_path: 0.16134746188805799
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.340728759765625 seconds
Loss: 0.5797
Train Accuracy: 79.24%
Test Accuracy: 76.08%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.567420244216919 seconds
LR changed during epoch: 1.80e-04 -> 1.77e-04
total runtime to train this model was 26.964871883392334 seconds
Hyperparameteres for model 3 at epoch 39
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373
warmup_epochs: 5
batch_size: 256
```

_____ end of hyperparam printing _____
evaluation in 2.4337244033813477 seconds
Loss: 0.5938
Train Accuracy: 78.79%
Test Accuracy: 75.65%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.575026512145996 seconds
LR changed during epoch: 3.20e-04 -> 3.05e-04
total runtime to train this model was 26.8992440700531 seconds
Hyperparameteres for model 4 at epoch 39
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5814225673675537 seconds
Loss: 0.5087
Train Accuracy: 81.79%
Test Accuracy: 77.59%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 39 Summary:

=====

Time: 157.45s (Avg member: 31.49s)
Population Mean Accuracy: 76.37%
Best Member Accuracy: 77.59%
Mean Batch Size: 256
Mean Learning Rate: 4.15e-04
Mean Weight Decay: 0.082

=====

Epoch 40/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.610285997390747 seconds
LR changed during epoch: 3.28e-04 -> 4.10e-04
total runtime to train this model was 26.9743812084198 seconds
Hyperparameteres for model 0 at epoch 40
lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.522035837173462 seconds

Loss: 0.5428
Train Accuracy: 80.71%
Test Accuracy: 75.75%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6838304996490479 seconds
LR changed during epoch: 3.12e-04 -> 3.05e-04
total runtime to train this model was 27.401081323623657 seconds
Hyperparameteres for model 1 at epoch 40
lr: 0.00038835301155623137

weight_decay: 0.04585650555717065
drop_path: 0.0
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.415872573852539 seconds
Loss: 0.5463
Train Accuracy: 80.59%
Test Accuracy: 75.59%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5814378261566162 seconds
LR changed during epoch: 4.17e-04 -> 4.15e-04
total runtime to train this model was 27.92890238761902 seconds
Hyperparameteres for model 2 at epoch 40
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983
drop_path: 0.16134746188805799
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.468210220336914 seconds
Loss: 0.5730
Train Accuracy: 79.52%
Test Accuracy: 76.20%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5944349765777588 seconds
LR changed during epoch: 1.77e-04 -> 1.74e-04
total runtime to train this model was 27.44267702102661 seconds
Hyperparameteres for model 3 at epoch 40
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3654630184173584 seconds
Loss: 0.5865
Train Accuracy: 79.24%
Test Accuracy: 76.10%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.678741455078125 seconds
LR changed during epoch: 3.05e-04 -> 2.89e-04
total runtime to train this model was 26.444114923477173 seconds
Hyperparameteres for model 4 at epoch 40
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.605550527572632 seconds
Loss: 0.4931
Train Accuracy: 82.45%
Test Accuracy: 77.28%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

==== PBT Exploit & Explore ====
Top performers: [77.28]
Bottom performers: [75.59]
Member 1: lr changed from 0.00038835301155623137 to 0.0005953218039881506
Member 1: weight_decay changed from 0.04585650555717065 to 0.037078869947073
Member 1: drop_path changed from 0.0 to 0.03144087729213888
Member 1 copied from 4
LR=5.95e-04, WD=0.037, DropPath=0.031, Warmup=5 epochs, Batch=256

=====
Epoch 40 Summary:
=====

Time: 160.02s (Avg member: 32.00s)
Population Mean Accuracy: 76.18%
Best Member Accuracy: 77.28%
Mean Batch Size: 256
Mean Learning Rate: 4.56e-04
Mean Weight Decay: 0.080

=====
Epoch 41/70
=====

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

built data in 1.575942039489746 seconds
LR changed during epoch: 4.10e-04 -> 4.10e-04
total runtime to train this model was 26.425872325897217 seconds
Hyperparameteres for model 0 at epoch 41
lr: 0.0004100922132870585

weight_decay: 0.15
drop_path: 0.035977724149078544
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.512627601623535 seconds

Loss: 0.5536
Train Accuracy: 80.17%
Test Accuracy: 76.50%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.62214994430542 seconds
LR changed during epoch: 6.07e-07 -> 1.20e-04
total runtime to train this model was 26.7204270362854 seconds
Hyperparameteres for model 1 at epoch 41
lr: 0.0005953218039881506

weight_decay: 0.037078869947073
drop_path: 0.03144087729213888
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.433506727218628 seconds

Loss: 0.4076
Train Accuracy: 85.73%
Test Accuracy: 78.01%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6812620162963867 seconds
LR changed during epoch: 4.15e-04 -> 4.12e-04
total runtime to train this model was 26.704881191253662 seconds
Hyperparameteres for model 2 at epoch 41
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983
drop_path: 0.16134746188805799
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6621105670928955 seconds

Loss: 0.5582
Train Accuracy: 80.19%
Test Accuracy: 76.38%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.600776195526123 seconds
LR changed during epoch: 1.74e-04 -> 1.71e-04
total runtime to train this model was 26.83576488494873 seconds
Hyperparameters for model 3 at epoch 41
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3994343280792236 seconds
Loss: 0.5753
Train Accuracy: 79.62%
Test Accuracy: 76.46%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5934689044952393 seconds
LR changed during epoch: 2.89e-04 -> 2.73e-04
total runtime to train this model was 26.752102851867676 seconds
Hyperparameters for model 4 at epoch 41
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4899797439575195 seconds
Loss: 0.4779
Train Accuracy: 82.83%
Test Accuracy: 77.96%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 41 Summary:

=====

Time: 156.23s (Avg member: 31.25s)
Population Mean Accuracy: 77.06%
Best Member Accuracy: 78.01%
Mean Batch Size: 256
Mean Learning Rate: 4.56e-04
Mean Weight Decay: 0.080

```
=====
Epoch 42/70
=====
```

--- Training Member 0 (Batch size: 256) ---
built data in 1.6001513004302979 seconds
LR changed during epoch: 4.10e-04 -> 4.09e-04
total runtime to train this model was 26.661717891693115 seconds
Hyperparameteres for model 0 at epoch 42
lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6507654190063477 seconds

Loss: 0.5411
Train Accuracy: 80.63%
Test Accuracy: 76.73%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.8348135948181152 seconds
LR changed during epoch: 1.20e-04 -> 2.39e-04
total runtime to train this model was 26.982645511627197 seconds
Hyperparameteres for model 1 at epoch 42
lr: 0.0005953218039881506

weight_decay: 0.037078869947073

drop_path: 0.03144087729213888

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.094174861907959 seconds

Loss: 0.4083
Train Accuracy: 85.67%
Test Accuracy: 77.20%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6346173286437988 seconds
LR changed during epoch: 4.12e-04 -> 4.09e-04
total runtime to train this model was 27.089385509490967 seconds
Hyperparameteres for model 2 at epoch 42
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4735615253448486 seconds

Loss: 0.5491

Train Accuracy: 80.64%

Test Accuracy: 77.07%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6180522441864014 seconds

LR changed during epoch: 1.71e-04 -> 1.67e-04

total runtime to train this model was 26.914684772491455 seconds

Hyperparameteres for model 3 at epoch 42

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.372518539428711 seconds

Loss: 0.5656

Train Accuracy: 79.87%

Test Accuracy: 75.88%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.7071013450622559 seconds

LR changed during epoch: 2.73e-04 -> 2.58e-04

total runtime to train this model was 27.221224546432495 seconds

Hyperparameteres for model 4 at epoch 42

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.725328207015991 seconds

Loss: 0.4522

Train Accuracy: 83.80%

Test Accuracy: 77.38%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 42 Summary:

=====

Time: 158.82s (Avg member: 31.76s)

Population Mean Accuracy: 76.85%

Best Member Accuracy: 77.38%

Mean Batch Size: 256

Mean Learning Rate: 4.56e-04

Mean Weight Decay: 0.080

=====

Epoch 43/70

=====

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

built data in 1.614030122756958 seconds

LR changed during epoch: 4.09e-04 -> 4.08e-04

total runtime to train this model was 27.402240753173828 seconds

Hyperparameteres for model 0 at epoch 43

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.560682773590088 seconds

Loss: 0.5336

Train Accuracy: 81.16%

Test Accuracy: 76.12%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.5801177024841309 seconds

LR changed during epoch: 2.39e-04 -> 3.58e-04

total runtime to train this model was 26.992403030395508 seconds

Hyperparameteres for model 1 at epoch 43

lr: 0.0005953218039881506

weight_decay: 0.037078869947073

drop_path: 0.03144087729213888

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5527443885803223 seconds

Loss: 0.4405

Train Accuracy: 84.15%

Test Accuracy: 76.77%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6186420917510986 seconds

LR changed during epoch: 4.09e-04 -> 4.06e-04

total runtime to train this model was 27.097137451171875 seconds

Hyperparameteres for model 2 at epoch 43

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.544036626815796 seconds

Loss: 0.5312

Train Accuracy: 80.90%

Test Accuracy: 76.29%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.5999674797058105 seconds

LR changed during epoch: 1.67e-04 -> 1.64e-04

total runtime to train this model was 27.005136728286743 seconds

Hyperparameteres for model 3 at epoch 43

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5067875385284424 seconds

Loss: 0.5532

Train Accuracy: 80.37%

Test Accuracy: 76.99%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5915603637695312 seconds

LR changed during epoch: 2.58e-04 -> 2.42e-04

total runtime to train this model was 27.346593618392944 seconds

Hyperparameteres for model 4 at epoch 43

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5017080307006836 seconds

Loss: 0.4365

Train Accuracy: 84.45%

Test Accuracy: 77.41%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

```
=====
Epoch 43 Summary:
```

```
Time: 158.80s (Avg member: 31.76s)
Population Mean Accuracy: 76.72%
Best Member Accuracy: 77.41%
Mean Batch Size: 256
Mean Learning Rate: 4.56e-04
Mean Weight Decay: 0.080
```

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

```
--- Training Member 0 (Batch size: 256) ---
built data in 1.6243720054626465 seconds
LR changed during epoch: 4.08e-04 -> 4.06e-04
total runtime to train this model was 27.407363414764404 seconds
Hyperparameteres for model 0 at epoch 44
lr: 0.0004100922132870585
```

```
weight_decay: 0.15
```

```
drop_path: 0.035977724149078544
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 3.3111910820007324 seconds
```

```
Loss: 0.5201
Train Accuracy: 81.24%
Test Accuracy: 75.93%
```

```
Google Drive already mounted.
```

```
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt
```

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

```
built data in 1.7181057929992676 seconds
LR changed during epoch: 3.58e-04 -> 4.77e-04
total runtime to train this model was 27.1603901386261 seconds
Hyperparameteres for model 1 at epoch 44
lr: 0.0005953218039881506
```

```
weight_decay: 0.037078869947073
```

```
drop_path: 0.03144087729213888
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.491093397140503 seconds
```

```
Loss: 0.4828
Train Accuracy: 82.62%
Test Accuracy: 76.36%
```

```
Google Drive already mounted.
```

```
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt
```

```
--- Training Member 2 (Batch size: 256) ---
built data in 1.5752503871917725 seconds
```

LR changed during epoch: 4.06e-04 -> 4.02e-04
total runtime to train this model was 26.866583108901978 seconds
Hyperparameteres for model 2 at epoch 44
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4415318965911865 seconds

Loss: 0.5252
Train Accuracy: 81.25%
Test Accuracy: 77.57%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.5778987407684326 seconds
LR changed during epoch: 1.64e-04 -> 1.60e-04
total runtime to train this model was 26.95840311050415 seconds
Hyperparameteres for model 3 at epoch 44
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4093246459960938 seconds

Loss: 0.5453
Train Accuracy: 80.52%
Test Accuracy: 76.43%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.71602463722229 seconds
LR changed during epoch: 2.42e-04 -> 2.27e-04
total runtime to train this model was 26.327169179916382 seconds
Hyperparameteres for model 4 at epoch 44
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.527409791946411 seconds
Loss: 0.4211

Train Accuracy: 84.87%
Test Accuracy: 78.43%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====
Epoch 44 Summary:
=====

Time: 158.34s (Avg member: 31.67s)
Population Mean Accuracy: 76.94%
Best Member Accuracy: 78.43%
Mean Batch Size: 256
Mean Learning Rate: 4.56e-04
Mean Weight Decay: 0.080

=====
Epoch 45/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5950865745544434 seconds
LR changed during epoch: 4.06e-04 -> 4.04e-04
total runtime to train this model was 26.750943899154663 seconds
Hyperparameteres for model 0 at epoch 45
lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.434758424758911 seconds

Loss: 0.5159
Train Accuracy: 81.58%
Test Accuracy: 76.84%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.595658540725708 seconds
LR changed during epoch: 4.77e-04 -> 5.95e-04
total runtime to train this model was 26.908486127853394 seconds
Hyperparameteres for model 1 at epoch 45
lr: 0.0005953218039881506

weight_decay: 0.037078869947073

drop_path: 0.03144087729213888

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3750381469726562 seconds
Loss: 0.5134
Train Accuracy: 81.55%
Test Accuracy: 75.86%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.594151258468628 seconds

LR changed during epoch: 4.02e-04 -> 3.97e-04

total runtime to train this model was 26.866417169570923 seconds

Hyperparameteres for model 2 at epoch 45

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.9100539684295654 seconds

Loss: 0.5044

Train Accuracy: 81.92%

Test Accuracy: 76.99%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.7266442775726318 seconds

LR changed during epoch: 1.60e-04 -> 1.56e-04

total runtime to train this model was 26.5381760597229 seconds

Hyperparameteres for model 3 at epoch 45

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.7228078842163086 seconds

Loss: 0.5360

Train Accuracy: 80.99%

Test Accuracy: 77.05%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5816779136657715 seconds

LR changed during epoch: 2.27e-04 -> 2.12e-04

total runtime to train this model was 26.98592233657837 seconds

Hyperparameteres for model 4 at epoch 45

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4880616664886475 seconds

Loss: 0.4010

Train Accuracy: 85.63%

Test Accuracy: 77.63%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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

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

Top performers: [77.63]

Bottom performers: [75.86]

Member 1: lr changed from 0.0005953218039881506 to 0.0004723774771325106

Member 1: weight_decay changed from 0.037078869947073 to 0.04736941144141409

Member 1: drop_path changed from 0.03144087729213888 to 0.01734782013714527

Member 1 copied from 4

LR=4.72e-04, WD=0.047, DropPath=0.017, Warmup=5 epochs, Batch=256

=====

Epoch 45 Summary:

=====

Time: 156.35s (Avg member: 31.27s)

Population Mean Accuracy: 76.87%

Best Member Accuracy: 77.63%

Mean Batch Size: 256

Mean Learning Rate: 4.32e-04

Mean Weight Decay: 0.082

=====

Epoch 46/70

=====

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

built data in 1.6442294120788574 seconds

LR changed during epoch: 4.04e-04 -> 4.02e-04

total runtime to train this model was 27.104825258255005 seconds

Hyperparameteres for model 0 at epoch 46

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.473048210144043 seconds

Loss: 0.5062

Train Accuracy: 81.95%

Test Accuracy: 76.48%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.708981990814209 seconds

LR changed during epoch: 4.82e-07 -> 9.50e-05

total runtime to train this model was 26.429418087005615 seconds

Hyperparameteres for model 1 at epoch 46

lr: 0.0004723774771325106

weight_decay: 0.04736941144141409

drop_path: 0.01734782013714527

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.7891793251037598 seconds

Loss: 0.3322

Train Accuracy: 88.10%

Test Accuracy: 78.55%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6531445980072021 seconds

LR changed during epoch: 3.97e-04 -> 3.92e-04

total runtime to train this model was 26.51612401008606 seconds

Hyperparameteres for model 2 at epoch 46

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.428093671798706 seconds

Loss: 0.5000

Train Accuracy: 82.14%

Test Accuracy: 77.41%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.660076379776001 seconds

LR changed during epoch: 1.56e-04 -> 1.52e-04

total runtime to train this model was 27.52176308631897 seconds

Hyperparameteres for model 3 at epoch 46

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5368492603302 seconds

Loss: 0.5244

Train Accuracy: 81.35%

Test Accuracy: 76.57%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.602525234222412 seconds

LR changed during epoch: 2.12e-04 -> 1.98e-04

total runtime to train this model was 27.38842487335205 seconds

Hyperparameteres for model 4 at epoch 46

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.1298515796661377 seconds

Loss: 0.3893

Train Accuracy: 85.90%

Test Accuracy: 78.04%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 46 Summary:

=====

Time: 158.85s (Avg member: 31.77s)

Population Mean Accuracy: 77.41%

Best Member Accuracy: 78.55%

Mean Batch Size: 256

Mean Learning Rate: 4.32e-04

Mean Weight Decay: 0.082

=====

Epoch 47/70

=====

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

built data in 1.8818061351776123 seconds

LR changed during epoch: 4.02e-04 -> 3.98e-04

total runtime to train this model was 27.276097297668457 seconds

Hyperparameteres for model 0 at epoch 47

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.542017936706543 seconds

Loss: 0.4979

Train Accuracy: 82.15%

Test Accuracy: 76.15%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5737085342407227 seconds
LR changed during epoch: 9.50e-05 -> 1.89e-04
total runtime to train this model was 26.98806118965149 seconds
Hyperparameteres for model 1 at epoch 47
lr: 0.0004723774771325106

weight_decay: 0.04736941144141409

drop_path: 0.01734782013714527

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.398317813873291 seconds
Loss: 0.3338
Train Accuracy: 87.99%
Test Accuracy: 77.87%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6571719646453857 seconds
LR changed during epoch: 3.92e-04 -> 3.87e-04
total runtime to train this model was 26.590614557266235 seconds
Hyperparameteres for model 2 at epoch 47
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4499897956848145 seconds
Loss: 0.4836
Train Accuracy: 82.77%
Test Accuracy: 77.61%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7985639572143555 seconds
LR changed during epoch: 1.52e-04 -> 1.48e-04
total runtime to train this model was 26.57648229598999 seconds
Hyperparameteres for model 3 at epoch 47
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.567591667175293 seconds
Loss: 0.5113
Train Accuracy: 81.82%
Test Accuracy: 77.08%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.628206729888916 seconds
LR changed during epoch: 1.98e-04 -> 1.83e-04
total runtime to train this model was 26.847283840179443 seconds
Hyperparameteres for model 4 at epoch 47
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.48561954498291 seconds
Loss: 0.3704
Train Accuracy: 86.78%
Test Accuracy: 78.11%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 47 Summary:

=====

Time: 157.48s (Avg member: 31.50s)
Population Mean Accuracy: 77.36%
Best Member Accuracy: 78.11%
Mean Batch Size: 256
Mean Learning Rate: 4.32e-04
Mean Weight Decay: 0.082

=====

Epoch 48/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.581237554550171 seconds
LR changed during epoch: 3.98e-04 -> 3.95e-04
total runtime to train this model was 27.191763401031494 seconds
Hyperparameteres for model 0 at epoch 48
lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.519740581512451 seconds

Loss: 0.4821
Train Accuracy: 82.60%
Test Accuracy: 76.19%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.692535161972046 seconds
LR changed during epoch: 1.89e-04 -> 2.84e-04
total runtime to train this model was 26.78945016860962 seconds
Hyperparameteres for model 1 at epoch 48
lr: 0.0004723774771325106

weight_decay: 0.04736941144141409
drop_path: 0.01734782013714527
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2730071544647217 seconds
Loss: 0.3546
Train Accuracy: 87.37%
Test Accuracy: 78.05%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.696936845779419 seconds
LR changed during epoch: 3.87e-04 -> 3.81e-04
total runtime to train this model was 27.1950523853302 seconds
Hyperparameteres for model 2 at epoch 48
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983
drop_path: 0.16134746188805799
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4973411560058594 seconds
Loss: 0.4722
Train Accuracy: 83.21%
Test Accuracy: 77.40%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6357758045196533 seconds
LR changed during epoch: 1.48e-04 -> 1.44e-04
total runtime to train this model was 26.73852229118347 seconds
Hyperparameteres for model 3 at epoch 48
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4983103275299072 seconds

Loss: 0.5041

Train Accuracy: 82.04%

Test Accuracy: 77.22%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5764222145080566 seconds

LR changed during epoch: 1.83e-04 -> 1.69e-04

total runtime to train this model was 26.868736028671265 seconds

Hyperparameteres for model 4 at epoch 48

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.763967990875244 seconds

Loss: 0.3496

Train Accuracy: 87.45%

Test Accuracy: 78.86%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 48 Summary:

=====

Time: 157.79s (Avg member: 31.56s)

Population Mean Accuracy: 77.54%

Best Member Accuracy: 78.86%

Mean Batch Size: 256

Mean Learning Rate: 4.32e-04

Mean Weight Decay: 0.082

=====

Epoch 49/70

=====

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

built data in 1.863922119140625 seconds

LR changed during epoch: 3.95e-04 -> 3.91e-04

total runtime to train this model was 26.36271095275879 seconds

Hyperparameteres for model 0 at epoch 49

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2871222496032715 seconds

Loss: 0.4711

Train Accuracy: 83.14%

Test Accuracy: 77.07%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.5811779499053955 seconds

LR changed during epoch: 2.84e-04 -> 3.78e-04

total runtime to train this model was 26.988749265670776 seconds

Hyperparameteres for model 1 at epoch 49

lr: 0.0004723774771325106

weight_decay: 0.04736941144141409

drop_path: 0.01734782013714527

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.50447154045105 seconds

Loss: 0.3924

Train Accuracy: 85.88%

Test Accuracy: 76.55%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.622795581817627 seconds

LR changed during epoch: 3.81e-04 -> 3.75e-04

total runtime to train this model was 26.73038625717163 seconds

Hyperparameteres for model 2 at epoch 49

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4368174076080322 seconds

Loss: 0.4618

Train Accuracy: 83.31%

Test Accuracy: 78.61%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6262896060943604 seconds

LR changed during epoch: 1.44e-04 -> 1.40e-04

total runtime to train this model was 26.826610326766968 seconds

Hyperparameteres for model 3 at epoch 49

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.695321559906006 seconds

Loss: 0.4991

Train Accuracy: 82.23%

Test Accuracy: 76.97%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.628528118133545 seconds

LR changed during epoch: 1.69e-04 -> 1.56e-04

total runtime to train this model was 27.07469129562378 seconds

Hyperparameteres for model 4 at epoch 49

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5179340839385986 seconds

Loss: 0.3399

Train Accuracy: 87.90%

Test Accuracy: 78.34%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 49 Summary:

=====

Time: 158.01s (Avg member: 31.60s)

Population Mean Accuracy: 77.51%

Best Member Accuracy: 78.61%

Mean Batch Size: 256

Mean Learning Rate: 4.32e-04

Mean Weight Decay: 0.082

=====

Epoch 50/70

=====

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

built data in 1.607008934020996 seconds

LR changed during epoch: 3.91e-04 -> 3.87e-04

total runtime to train this model was 27.38031816482544 seconds

Hyperparameteres for model 0 at epoch 50

lr: 0.0004100922132870585

weight_decay: 0.15
drop_path: 0.035977724149078544

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.409088134765625 seconds

Loss: 0.4589

Train Accuracy: 83.60%
Test Accuracy: 76.49%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6510658264160156 seconds

LR changed during epoch: 3.78e-04 -> 4.72e-04

total runtime to train this model was 26.859862565994263 seconds

Hyperparameteres for model 1 at epoch 50

lr: 0.0004723774771325106

weight_decay: 0.04736941144141409

drop_path: 0.01734782013714527

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.952984094619751 seconds

Loss: 0.4242

Train Accuracy: 84.77%
Test Accuracy: 75.75%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.7889838218688965 seconds

LR changed during epoch: 3.75e-04 -> 3.68e-04

total runtime to train this model was 26.936399459838867 seconds

Hyperparameteres for model 2 at epoch 50

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5579113960266113 seconds

Loss: 0.4436

Train Accuracy: 84.12%
Test Accuracy: 77.42%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6308951377868652 seconds
LR changed during epoch: 1.40e-04 -> 1.35e-04
total runtime to train this model was 26.93525004386902 seconds
Hyperparameteres for model 3 at epoch 50
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.446753740310669 seconds
Loss: 0.4830
Train Accuracy: 82.68%
Test Accuracy: 77.21%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.574587106704712 seconds
LR changed during epoch: 1.56e-04 -> 1.42e-04
total runtime to train this model was 26.836097478866577 seconds
Hyperparameteres for model 4 at epoch 50
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4711334705352783 seconds
Loss: 0.3173
Train Accuracy: 88.56%
Test Accuracy: 78.33%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

--- Population Update (Epoch 50) ---

==== PBT Exploit & Explore ====
Top performers: [78.33]
Bottom performers: [75.75]
Member 1: lr changed from 0.0004723774771325106 to 0.0003043297328772563
Member 1: weight_decay changed from 0.04736941144141409 to 0.05339576526131328
Member 1: drop_path changed from 0.01734782013714527 to 0.020385008657948997
Member 1 copied from 4
LR=3.04e-04, WD=0.053, DropPath=0.020, Warmup=5 epochs, Batch=256

=====
Epoch 50 Summary:
=====

Time: 157.30s (Avg member: 31.46s)
Population Mean Accuracy: 77.04%

Best Member Accuracy: 78.33%

Mean Batch Size: 256

Mean Learning Rate: 3.98e-04

Mean Weight Decay: 0.083

=====

Epoch 51/70

=====

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

built data in 1.7191944122314453 seconds

LR changed during epoch: 3.87e-04 -> 3.82e-04

total runtime to train this model was 26.45255970954895 seconds

Hyperparameteres for model 0 at epoch 51

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.5835959911346436 seconds

Loss: 0.4549

Train Accuracy: 83.72%

Test Accuracy: 76.30%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6472837924957275 seconds

LR changed during epoch: 3.11e-07 -> 6.12e-05

total runtime to train this model was 26.898609399795532 seconds

Hyperparameteres for model 1 at epoch 51

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.48625111579895 seconds

Loss: 0.2675

Train Accuracy: 90.58%

Test Accuracy: 78.89%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.605065107345581 seconds

LR changed during epoch: 3.68e-04 -> 3.61e-04

total runtime to train this model was 26.956931829452515 seconds

Hyperparameteres for model 2 at epoch 51

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.49410080909729 seconds

Loss: 0.4356

Train Accuracy: 84.57%

Test Accuracy: 77.27%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.5691640377044678 seconds

LR changed during epoch: 1.35e-04 -> 1.31e-04

total runtime to train this model was 27.070358276367188 seconds

Hyperparameteres for model 3 at epoch 51

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.632120370864868 seconds

Loss: 0.4757

Train Accuracy: 83.25%

Test Accuracy: 77.66%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.7196929454803467 seconds

LR changed during epoch: 1.42e-04 -> 1.30e-04

total runtime to train this model was 26.187057495117188 seconds

Hyperparameteres for model 4 at epoch 51

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2205162048339844 seconds

Loss: 0.3077

Train Accuracy: 88.93%

Test Accuracy: 78.81%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

```
=====
Epoch 51 Summary:
```

```
Time: 157.54s (Avg member: 31.51s)
Population Mean Accuracy: 77.79%
Best Member Accuracy: 78.89%
Mean Batch Size: 256
Mean Learning Rate: 3.98e-04
Mean Weight Decay: 0.083
```

```
=====
Epoch 52/70
=====
```

```
--- Training Member 0 (Batch size: 256) ---
built data in 1.6244289875030518 seconds
LR changed during epoch: 3.82e-04 -> 3.77e-04
total runtime to train this model was 26.803451776504517 seconds
Hyperparameteres for model 0 at epoch 52
lr: 0.0004100922132870585
```

```
weight_decay: 0.15
```

```
drop_path: 0.035977724149078544
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.4239156246185303 seconds
```

```
Loss: 0.4428
Train Accuracy: 84.15%
Test Accuracy: 77.06%
```

```
Google Drive already mounted.
```

```
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt
```

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

```
built data in 1.5846257209777832 seconds
LR changed during epoch: 6.12e-05 -> 1.22e-04
total runtime to train this model was 26.7546067237854 seconds
Hyperparameteres for model 1 at epoch 52
lr: 0.0003043297328772563
```

```
weight_decay: 0.05339576526131328
```

```
drop_path: 0.020385008657948997
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.4399662017822266 seconds
```

```
Loss: 0.2666
Train Accuracy: 90.46%
Test Accuracy: 78.87%
```

```
Google Drive already mounted.
```

```
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt
```

```
--- Training Member 2 (Batch size: 256) ---
built data in 1.6132688522338867 seconds
```

LR changed during epoch: 3.61e-04 -> 3.54e-04
total runtime to train this model was 26.857672452926636 seconds
Hyperparameteres for model 2 at epoch 52
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.122258186340332 seconds

Loss: 0.4183
Train Accuracy: 85.11%
Test Accuracy: 77.91%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.7299745082855225 seconds
LR changed during epoch: 1.31e-04 -> 1.26e-04
total runtime to train this model was 27.25962233543396 seconds
Hyperparameteres for model 3 at epoch 52
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4576568603515625 seconds
Loss: 0.4642
Train Accuracy: 83.59%
Test Accuracy: 77.58%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.588465929031372 seconds
LR changed during epoch: 1.30e-04 -> 1.17e-04
total runtime to train this model was 26.514639377593994 seconds
Hyperparameteres for model 4 at epoch 52
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4025468826293945 seconds
Loss: 0.2930

Train Accuracy: 89.66%
Test Accuracy: 79.07%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====
Epoch 52 Summary:
=====

Time: 156.43s (Avg member: 31.29s)
Population Mean Accuracy: 78.10%
Best Member Accuracy: 79.07%
Mean Batch Size: 256
Mean Learning Rate: 3.98e-04
Mean Weight Decay: 0.083

=====
Epoch 53/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5888946056365967 seconds
LR changed during epoch: 3.77e-04 -> 3.71e-04
total runtime to train this model was 26.849376440048218 seconds
Hyperparameteres for model 0 at epoch 53
lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4036922454833984 seconds

Loss: 0.4321
Train Accuracy: 84.55%
Test Accuracy: 77.29%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7275981903076172 seconds
LR changed during epoch: 1.22e-04 -> 1.83e-04
total runtime to train this model was 26.313886642456055 seconds
Hyperparameteres for model 1 at epoch 53
lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6360836029052734 seconds
Loss: 0.2766
Train Accuracy: 90.13%
Test Accuracy: 77.99%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.5817153453826904 seconds

LR changed during epoch: 3.54e-04 -> 3.47e-04

total runtime to train this model was 26.98136830329895 seconds

Hyperparameteres for model 2 at epoch 53

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4394123554229736 seconds

Loss: 0.4114

Train Accuracy: 85.19%

Test Accuracy: 78.06%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.5806949138641357 seconds

LR changed during epoch: 1.26e-04 -> 1.21e-04

total runtime to train this model was 26.678818464279175 seconds

Hyperparameteres for model 3 at epoch 53

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4900755882263184 seconds

Loss: 0.4590

Train Accuracy: 83.52%

Test Accuracy: 77.57%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5589203834533691 seconds

LR changed during epoch: 1.17e-04 -> 1.05e-04

total runtime to train this model was 26.88376498222351 seconds

Hyperparameteres for model 4 at epoch 53

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5525782108306885 seconds

Loss: 0.2776

Train Accuracy: 89.94%

Test Accuracy: 78.78%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 53 Summary:

=====

Time: 156.55s (Avg member: 31.31s)

Population Mean Accuracy: 77.94%

Best Member Accuracy: 78.78%

Mean Batch Size: 256

Mean Learning Rate: 3.98e-04

Mean Weight Decay: 0.083

=====

Epoch 54/70

=====

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

built data in 1.7787234783172607 seconds

LR changed during epoch: 3.71e-04 -> 3.65e-04

total runtime to train this model was 27.025787591934204 seconds

Hyperparameteres for model 0 at epoch 54

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0391619205474854 seconds

Loss: 0.4181

Train Accuracy: 85.09%

Test Accuracy: 76.76%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.605907678604126 seconds

LR changed during epoch: 1.83e-04 -> 2.44e-04

total runtime to train this model was 27.364686250686646 seconds

Hyperparameteres for model 1 at epoch 54

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4775936603546143 seconds
Loss: 0.3019
Train Accuracy: 89.07%
Test Accuracy: 78.47%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6525707244873047 seconds
LR changed during epoch: 3.47e-04 -> 3.39e-04
total runtime to train this model was 28.214790105819702 seconds
Hyperparameteres for model 2 at epoch 54
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.650529384613037 seconds
Loss: 0.3939
Train Accuracy: 85.93%
Test Accuracy: 77.81%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8449182510375977 seconds
LR changed during epoch: 1.21e-04 -> 1.17e-04
total runtime to train this model was 28.557491302490234 seconds
Hyperparameteres for model 3 at epoch 54
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5658490657806396 seconds
Loss: 0.4440
Train Accuracy: 84.35%
Test Accuracy: 78.01%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5867183208465576 seconds
LR changed during epoch: 1.05e-04 -> 9.40e-05
total runtime to train this model was 27.282888174057007 seconds
Hyperparameteres for model 4 at epoch 54
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4268457889556885 seconds

Loss: 0.2619

Train Accuracy: 90.69%

Test Accuracy: 79.11%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 54 Summary:

=====

Time: 161.34s (Avg member: 32.27s)

Population Mean Accuracy: 78.03%

Best Member Accuracy: 79.11%

Mean Batch Size: 256

Mean Learning Rate: 3.98e-04

Mean Weight Decay: 0.083

=====

Epoch 55/70

=====

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

built data in 1.6122722625732422 seconds

LR changed during epoch: 3.65e-04 -> 3.59e-04

total runtime to train this model was 27.222970008850098 seconds

Hyperparameteres for model 0 at epoch 55

lr: 0.0004100922132870585

weight_decay: 0.15

drop_path: 0.035977724149078544

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.477869749069214 seconds

Loss: 0.4015

Train Accuracy: 85.64%

Test Accuracy: 76.80%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.7340142726898193 seconds

LR changed during epoch: 2.44e-04 -> 3.04e-04

total runtime to train this model was 26.729605436325073 seconds

Hyperparameteres for model 1 at epoch 55

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2644169330596924 seconds

Loss: 0.3256

Train Accuracy: 88.39%

Test Accuracy: 77.41%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.575843334197998 seconds

LR changed during epoch: 3.39e-04 -> 3.30e-04

total runtime to train this model was 26.853448390960693 seconds

Hyperparameteres for model 2 at epoch 55

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.370513916015625 seconds

Loss: 0.3823

Train Accuracy: 86.25%

Test Accuracy: 78.23%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.57700514793396 seconds

LR changed during epoch: 1.17e-04 -> 1.12e-04

total runtime to train this model was 26.727226495742798 seconds

Hyperparameteres for model 3 at epoch 55

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4056107997894287 seconds

Loss: 0.4380

Train Accuracy: 84.56%

Test Accuracy: 78.19%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.574605941772461 seconds

LR changed during epoch: 9.40e-05 -> 8.33e-05

total runtime to train this model was 27.16492772102356 seconds

Hyperparameteres for model 4 at epoch 55

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.0734641551971436 seconds

Loss: 0.2562

Train Accuracy: 90.82%

Test Accuracy: 78.90%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

--- Population Update (Epoch 55) ---

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

Top performers: [78.9]

Bottom performers: [76.8]

Member 0: lr changed from 0.0004100922132870585 to 0.0003520871467298879

Member 0: weight_decay changed from 0.15 to 0.13328747044107664

Member 0: drop_path changed from 0.035977724149078544 to 0.07512454103710708

Member 0 copied from 4

LR=3.52e-04, WD=0.133, DropPath=0.075, Warmup=5 epochs, Batch=256

=====

Epoch 55 Summary:

=====

Time: 157.71s (Avg member: 31.54s)

Population Mean Accuracy: 77.91%

Best Member Accuracy: 78.90%

Mean Batch Size: 256

Mean Learning Rate: 3.86e-04

Mean Weight Decay: 0.080

=====

Epoch 56/70

=====

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

built data in 1.73622727394104 seconds

LR changed during epoch: 3.59e-07 -> 7.08e-05

total runtime to train this model was 27.22347593307495 seconds

Hyperparameteres for model 0 at epoch 56

lr: 0.0003520871467298879

weight_decay: 0.13328747044107664

drop_path: 0.07512454103710708

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5213422775268555 seconds

Loss: 0.2077
Train Accuracy: 92.62%
Test Accuracy: 78.85%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5971245765686035 seconds
LR changed during epoch: 3.04e-04 -> 3.04e-04
total runtime to train this model was 27.36543917655945 seconds
Hyperparameteres for model 1 at epoch 56
lr: 0.0003043297328772563

weight_decay: 0.05339576526131328
drop_path: 0.020385008657948997
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.50002384185791 seconds
Loss: 0.3340
Train Accuracy: 88.04%
Test Accuracy: 77.63%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5730462074279785 seconds
LR changed during epoch: 3.30e-04 -> 3.22e-04
total runtime to train this model was 26.889411687850952 seconds
Hyperparameteres for model 2 at epoch 56
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983
drop_path: 0.16134746188805799
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.48587965965271 seconds
Loss: 0.3672
Train Accuracy: 86.98%
Test Accuracy: 77.86%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7329699993133545 seconds
LR changed during epoch: 1.12e-04 -> 1.07e-04
total runtime to train this model was 26.76329231262207 seconds
Hyperparameteres for model 3 at epoch 56
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4502768516540527 seconds

Loss: 0.4342

Train Accuracy: 84.49%

Test Accuracy: 78.13%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5911002159118652 seconds

LR changed during epoch: 8.33e-05 -> 7.31e-05

total runtime to train this model was 27.149161100387573 seconds

Hyperparameteres for model 4 at epoch 56

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4048168659210205 seconds

Loss: 0.2440

Train Accuracy: 91.37%

Test Accuracy: 79.36%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 56 Summary:

=====

Time: 158.20s (Avg member: 31.64s)

Population Mean Accuracy: 78.37%

Best Member Accuracy: 79.36%

Mean Batch Size: 256

Mean Learning Rate: 3.86e-04

Mean Weight Decay: 0.080

=====

Epoch 57/70

=====

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

built data in 1.580442190170288 seconds

LR changed during epoch: 7.08e-05 -> 1.41e-04

total runtime to train this model was 27.190157890319824 seconds

Hyperparameteres for model 0 at epoch 57

lr: 0.0003520871467298879

weight_decay: 0.13328747044107664

drop_path: 0.07512454103710708

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.491121530532837 seconds

Loss: 0.2209

Train Accuracy: 92.18%

Test Accuracy: 78.39%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.597156286239624 seconds

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

total runtime to train this model was 27.474769353866577 seconds

Hyperparameteres for model 1 at epoch 57

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4720451831817627 seconds

Loss: 0.3311

Train Accuracy: 88.24%

Test Accuracy: 77.47%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6704952716827393 seconds

LR changed during epoch: 3.22e-04 -> 3.13e-04

total runtime to train this model was 27.089008331298828 seconds

Hyperparameteres for model 2 at epoch 57

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.479280471801758 seconds

Loss: 0.3536

Train Accuracy: 87.27%

Test Accuracy: 77.97%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.5772221088409424 seconds

LR changed during epoch: 1.07e-04 -> 1.02e-04

total runtime to train this model was 26.81108283996582 seconds

Hyperparameteres for model 3 at epoch 57

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5372750759124756 seconds

Loss: 0.4242

Train Accuracy: 84.86%

Test Accuracy: 78.23%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5891201496124268 seconds

LR changed during epoch: 7.31e-05 -> 6.35e-05

total runtime to train this model was 27.08699655532837 seconds

Hyperparameteres for model 4 at epoch 57

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6143620014190674 seconds

Loss: 0.2277

Train Accuracy: 92.02%

Test Accuracy: 79.47%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 57 Summary:

=====

Time: 158.58s (Avg member: 31.72s)

Population Mean Accuracy: 78.31%

Best Member Accuracy: 79.47%

Mean Batch Size: 256

Mean Learning Rate: 3.86e-04

Mean Weight Decay: 0.080

=====

Epoch 58/70

=====

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

built data in 1.7480249404907227 seconds

LR changed during epoch: 1.41e-04 -> 2.12e-04

total runtime to train this model was 26.659918308258057 seconds

Hyperparameteres for model 0 at epoch 58

lr: 0.0003520871467298879

weight_decay: 0.13328747044107664

drop_path: 0.07512454103710708

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.053942918777466 seconds

Loss: 0.2476

Train Accuracy: 91.15%

Test Accuracy: 77.52%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.5768680572509766 seconds

LR changed during epoch: 3.04e-04 -> 3.03e-04

total runtime to train this model was 27.059646606445312 seconds

Hyperparameteres for model 1 at epoch 58

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4626214504241943 seconds

Loss: 0.3219

Train Accuracy: 88.23%

Test Accuracy: 78.09%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.651916265487671 seconds

LR changed during epoch: 3.13e-04 -> 3.04e-04

total runtime to train this model was 27.029483556747437 seconds

Hyperparameteres for model 2 at epoch 58

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.46443772315979 seconds

Loss: 0.3455

Train Accuracy: 87.66%

Test Accuracy: 78.89%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6150565147399902 seconds
LR changed during epoch: 1.02e-04 -> 9.76e-05
total runtime to train this model was 27.4537296295166 seconds
Hyperparameteres for model 3 at epoch 58
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4144067764282227 seconds
Loss: 0.4088
Train Accuracy: 85.52%
Test Accuracy: 78.48%
Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.7547626495361328 seconds
LR changed during epoch: 6.35e-05 -> 5.45e-05
total runtime to train this model was 27.06432819366455 seconds
Hyperparameteres for model 4 at epoch 58
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4763402938842773 seconds
Loss: 0.2228
Train Accuracy: 92.00%
Test Accuracy: 79.11%
Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 58 Summary:

=====

Time: 158.74s (Avg member: 31.75s)
Population Mean Accuracy: 78.42%
Best Member Accuracy: 79.11%
Mean Batch Size: 256
Mean Learning Rate: 3.86e-04
Mean Weight Decay: 0.080

=====

Epoch 59/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.59881591796875 seconds

LR changed during epoch: 2.12e-04 -> 2.82e-04
total runtime to train this model was 26.92738175392151 seconds
Hyperparameteres for model 0 at epoch 59
lr: 0.0003520871467298879

weight_decay: 0.13328747044107664

drop_path: 0.07512454103710708

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4483163356781006 seconds

Loss: 0.2885
Train Accuracy: 89.75%
Test Accuracy: 77.92%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6213593482971191 seconds
LR changed during epoch: 3.03e-04 -> 3.01e-04
total runtime to train this model was 26.934601068496704 seconds
Hyperparameteres for model 1 at epoch 59
lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.641047477722168 seconds

Loss: 0.3087
Train Accuracy: 88.85%
Test Accuracy: 77.75%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.7652933597564697 seconds
LR changed during epoch: 3.04e-04 -> 2.95e-04
total runtime to train this model was 26.741238832473755 seconds
Hyperparameteres for model 2 at epoch 59
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.065614938735962 seconds
Loss: 0.3269

Train Accuracy: 88.29%
Test Accuracy: 78.79%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5842268466949463 seconds
LR changed during epoch: 9.76e-05 -> 9.28e-05
total runtime to train this model was 26.781652212142944 seconds
Hyperparameteres for model 3 at epoch 59
lr: 0.00019905296708947918

weight_decay: 0.15
drop_path: 0.11388284623645373
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.464993476867676 seconds
Loss: 0.4036
Train Accuracy: 85.49%
Test Accuracy: 78.15%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6110825538635254 seconds
LR changed during epoch: 5.45e-05 -> 4.61e-05
total runtime to train this model was 26.84763813018799 seconds
Hyperparameteres for model 4 at epoch 59
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714
drop_path: 0.10388890406522588
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.552813768386841 seconds
Loss: 0.2145
Train Accuracy: 92.51%
Test Accuracy: 79.52%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 59 Summary:

=====

Time: 156.86s (Avg member: 31.37s)
Population Mean Accuracy: 78.43%
Best Member Accuracy: 79.52%
Mean Batch Size: 256
Mean Learning Rate: 3.86e-04
Mean Weight Decay: 0.080

=====

Epoch 60/70

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

built data in 1.6974003314971924 seconds

LR changed during epoch: 2.82e-04 -> 3.52e-04

total runtime to train this model was 25.971808910369873 seconds

Hyperparameteres for model 0 at epoch 60

lr: 0.0003520871467298879

weight_decay: 0.13328747044107664

drop_path: 0.07512454103710708

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.651153087615967 seconds

Loss: 0.3146

Train Accuracy: 88.64%

Test Accuracy: 77.32%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6013050079345703 seconds

LR changed during epoch: 3.01e-04 -> 3.00e-04

total runtime to train this model was 26.58842968940735 seconds

Hyperparameteres for model 1 at epoch 60

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5360472202301025 seconds

Loss: 0.3076

Train Accuracy: 88.90%

Test Accuracy: 77.64%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.570213794708252 seconds

LR changed during epoch: 2.95e-04 -> 2.86e-04

total runtime to train this model was 26.415144681930542 seconds

Hyperparameteres for model 2 at epoch 60

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5087318420410156 seconds

Loss: 0.3163

Train Accuracy: 88.73%

Test Accuracy: 78.98%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.5763945579528809 seconds

LR changed during epoch: 9.28e-05 -> 8.81e-05

total runtime to train this model was 26.35606622695923 seconds

Hyperparameteres for model 3 at epoch 60

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4624695777893066 seconds

Loss: 0.3954

Train Accuracy: 85.86%

Test Accuracy: 78.13%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.681687831878662 seconds

LR changed during epoch: 4.61e-05 -> 3.85e-05

total runtime to train this model was 25.90584897994995 seconds

Hyperparameteres for model 4 at epoch 60

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.649243116378784 seconds

Loss: 0.2040

Train Accuracy: 92.82%

Test Accuracy: 79.28%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

--- Population Update (Epoch 60) ---

==== PBT Exploit & Explore ===

Top performers: [79.28]

Bottom performers: [77.32]

Member 0: lr changed from 0.0003520871467298879 to 0.00025644531862156246

Member 0: weight_decay changed from 0.13328747044107664 to 0.13051776131907136
Member 0: drop_path changed from 0.07512454103710708 to 0.06686624346140281
Member 0 copied from 4
LR=2.56e-04, WD=0.131, DropPath=0.067, Warmup=5 epochs, Batch=256

=====
Epoch 60 Summary:
=====

Time: 155.44s (Avg member: 31.09s)
Population Mean Accuracy: 78.27%
Best Member Accuracy: 79.28%
Mean Batch Size: 256
Mean Learning Rate: 3.67e-04
Mean Weight Decay: 0.079

=====
Epoch 61/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5930507183074951 seconds
LR changed during epoch: 2.62e-07 -> 5.16e-05
total runtime to train this model was 26.950319290161133 seconds
Hyperparameteres for model 0 at epoch 61
lr: 0.00025644531862156246

weight_decay: 0.13051776131907136

drop_path: 0.06686624346140281

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.480153799057007 seconds

Loss: 0.1759
Train Accuracy: 93.90%
Test Accuracy: 79.01%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.572566270828247 seconds
LR changed during epoch: 3.00e-04 -> 2.98e-04
total runtime to train this model was 26.866342782974243 seconds
Hyperparameteres for model 1 at epoch 61
lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4780139923095703 seconds
Loss: 0.2928
Train Accuracy: 89.36%
Test Accuracy: 78.03%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.580671787261963 seconds

LR changed during epoch: 2.86e-04 -> 2.76e-04

total runtime to train this model was 26.878629446029663 seconds

Hyperparameteres for model 2 at epoch 61

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.649736166000366 seconds

Loss: 0.2995

Train Accuracy: 89.16%

Test Accuracy: 78.25%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.768343210220337 seconds

LR changed during epoch: 8.81e-05 -> 8.33e-05

total runtime to train this model was 26.52179765701294 seconds

Hyperparameteres for model 3 at epoch 61

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.0334181785583496 seconds

Loss: 0.3848

Train Accuracy: 86.45%

Test Accuracy: 78.38%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5720813274383545 seconds

LR changed during epoch: 3.85e-05 -> 3.15e-05

total runtime to train this model was 26.712566375732422 seconds

Hyperparameteres for model 4 at epoch 61

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4194419384002686 seconds

Loss: 0.1978
Train Accuracy: 92.86%
Test Accuracy: 79.08%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 61 Summary:

=====

Time: 156.31s (Avg member: 31.26s)
Population Mean Accuracy: 78.55%
Best Member Accuracy: 79.08%
Mean Batch Size: 256
Mean Learning Rate: 3.67e-04
Mean Weight Decay: 0.079

=====

Epoch 62/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6285104751586914 seconds
LR changed during epoch: 5.16e-05 -> 1.03e-04
total runtime to train this model was 26.703917741775513 seconds
Hyperparameteres for model 0 at epoch 62
lr: 0.00025644531862156246

weight_decay: 0.13051776131907136

drop_path: 0.06686624346140281

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4663195610046387 seconds

Loss: 0.1857
Train Accuracy: 93.39%
Test Accuracy: 78.73%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6599736213684082 seconds
LR changed during epoch: 2.98e-04 -> 2.96e-04
total runtime to train this model was 26.80028247833252 seconds
Hyperparameteres for model 1 at epoch 62
lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1137733459472656 seconds
Loss: 0.2861
Train Accuracy: 89.60%
Test Accuracy: 78.34%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.81695556640625 seconds
LR changed during epoch: 2.76e-04 -> 2.66e-04
total runtime to train this model was 27.030360460281372 seconds
Hyperparameteres for model 2 at epoch 62
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5283451080322266 seconds
Loss: 0.2917
Train Accuracy: 89.48%
Test Accuracy: 78.82%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5835065841674805 seconds
LR changed during epoch: 8.33e-05 -> 7.86e-05
total runtime to train this model was 26.9999418258667 seconds
Hyperparameteres for model 3 at epoch 62
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.472531318664551 seconds
Loss: 0.3784
Train Accuracy: 86.58%
Test Accuracy: 78.25%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.648646354675293 seconds
LR changed during epoch: 3.15e-05 -> 2.51e-05
total runtime to train this model was 26.91629910469055 seconds
Hyperparameteres for model 4 at epoch 62
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4329018592834473 seconds

Loss: 0.1915

Train Accuracy: 93.16%

Test Accuracy: 79.36%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 62 Summary:

=====

Time: 157.08s (Avg member: 31.42s)

Population Mean Accuracy: 78.70%

Best Member Accuracy: 79.36%

Mean Batch Size: 256

Mean Learning Rate: 3.67e-04

Mean Weight Decay: 0.079

=====

Epoch 63/70

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

built data in 1.735337495803833 seconds

LR changed during epoch: 1.03e-04 -> 1.54e-04

total runtime to train this model was 26.546345710754395 seconds

Hyperparameteres for model 0 at epoch 63

lr: 0.00025644531862156246

weight_decay: 0.13051776131907136

drop_path: 0.06686624346140281

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4013876914978027 seconds

Loss: 0.2115

Train Accuracy: 92.33%

Test Accuracy: 78.58%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.6876122951507568 seconds

LR changed during epoch: 2.96e-04 -> 2.93e-04

total runtime to train this model was 26.719345092773438 seconds

Hyperparameteres for model 1 at epoch 63

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3435561656951904 seconds

Loss: 0.2810

Train Accuracy: 89.92%

Test Accuracy: 77.54%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.5855300426483154 seconds

LR changed during epoch: 2.66e-04 -> 2.56e-04

total runtime to train this model was 26.749507427215576 seconds

Hyperparameteres for model 2 at epoch 63

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.491851329803467 seconds

Loss: 0.2728

Train Accuracy: 90.31%

Test Accuracy: 78.86%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6628108024597168 seconds

LR changed during epoch: 7.86e-05 -> 7.40e-05

total runtime to train this model was 26.493809938430786 seconds

Hyperparameteres for model 3 at epoch 63

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.9106109142303467 seconds

Loss: 0.3701

Train Accuracy: 86.78%

Test Accuracy: 78.47%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.7798240184783936 seconds

LR changed during epoch: 2.51e-05 -> 1.95e-05

total runtime to train this model was 26.641197443008423 seconds

Hyperparameteres for model 4 at epoch 63

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.8931994438171387 seconds

Loss: 0.1876

Train Accuracy: 93.34%

Test Accuracy: 79.32%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 63 Summary:

=====

Time: 156.91s (Avg member: 31.38s)

Population Mean Accuracy: 78.55%

Best Member Accuracy: 79.32%

Mean Batch Size: 256

Mean Learning Rate: 3.67e-04

Mean Weight Decay: 0.079

=====

Epoch 64/70

=====

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

built data in 1.7029662132263184 seconds

LR changed during epoch: 1.54e-04 -> 2.05e-04

total runtime to train this model was 26.585888147354126 seconds

Hyperparameteres for model 0 at epoch 64

lr: 0.00025644531862156246

weight_decay: 0.13051776131907136

drop_path: 0.06686624346140281

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.437861442565918 seconds

Loss: 0.2297

Train Accuracy: 91.64%

Test Accuracy: 78.36%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.5684025287628174 seconds

LR changed during epoch: 2.93e-04 -> 2.90e-04

total runtime to train this model was 26.60702681541443 seconds

Hyperparameteres for model 1 at epoch 64

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.425525188446045 seconds

Loss: 0.2717

Train Accuracy: 90.18%

Test Accuracy: 77.81%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.6973421573638916 seconds

LR changed during epoch: 2.56e-04 -> 2.46e-04

total runtime to train this model was 26.27773404121399 seconds

Hyperparameteres for model 2 at epoch 64

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.292019844055176 seconds

Loss: 0.2644

Train Accuracy: 90.57%

Test Accuracy: 78.35%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6846578121185303 seconds

LR changed during epoch: 7.40e-05 -> 6.94e-05

total runtime to train this model was 26.862727165222168 seconds

Hyperparameteres for model 3 at epoch 64

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.502467393875122 seconds

Loss: 0.3628

Train Accuracy: 87.19%

Test Accuracy: 78.62%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.6240551471710205 seconds

LR changed during epoch: 1.95e-05 -> 1.46e-05

total runtime to train this model was 26.421133518218994 seconds

Hyperparameteres for model 4 at epoch 64

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4686026573181152 seconds

Loss: 0.1834

Train Accuracy: 93.63%

Test Accuracy: 79.34%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 64 Summary:

=====

Time: 155.41s (Avg member: 31.08s)

Population Mean Accuracy: 78.50%

Best Member Accuracy: 79.34%

Mean Batch Size: 256

Mean Learning Rate: 3.67e-04

Mean Weight Decay: 0.079

=====

Epoch 65/70

=====

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

built data in 1.6268393993377686 seconds

LR changed during epoch: 2.05e-04 -> 2.56e-04

total runtime to train this model was 26.98915386199951 seconds

Hyperparameteres for model 0 at epoch 65

lr: 0.00025644531862156246

weight_decay: 0.13051776131907136

drop_path: 0.06686624346140281

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.45756459236145 seconds

Loss: 0.2578

Train Accuracy: 90.66%

Test Accuracy: 77.56%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7745604515075684 seconds
LR changed during epoch: 2.90e-04 -> 2.87e-04
total runtime to train this model was 26.559555530548096 seconds
Hyperparameteres for model 1 at epoch 65
lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3870511054992676 seconds
Loss: 0.2618
Train Accuracy: 90.65%
Test Accuracy: 78.36%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.577852725982666 seconds
LR changed during epoch: 2.46e-04 -> 2.36e-04
total runtime to train this model was 27.018857955932617 seconds
Hyperparameteres for model 2 at epoch 65
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5291476249694824 seconds
Loss: 0.2548
Train Accuracy: 90.98%
Test Accuracy: 78.26%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6223089694976807 seconds
LR changed during epoch: 6.94e-05 -> 6.49e-05
total runtime to train this model was 26.812331438064575 seconds
Hyperparameteres for model 3 at epoch 65
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4692203998565674 seconds

Loss: 0.3557

Train Accuracy: 87.27%

Test Accuracy: 78.74%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.5923244953155518 seconds

LR changed during epoch: 1.46e-05 -> 1.05e-05

total runtime to train this model was 27.24096417427063 seconds

Hyperparameteres for model 4 at epoch 65

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.978163719177246 seconds

Loss: 0.1797

Train Accuracy: 93.70%

Test Accuracy: 79.09%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

--- Population Update (Epoch 65) ---

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

Top performers: [79.09]

Bottom performers: [77.56]

Member 0: lr changed from 0.00025644531862156246 to 0.00028870516812461714

Member 0: weight_decay changed from 0.13051776131907136 to 0.11684125924288669

Member 0: drop_path changed from 0.06686624346140281 to 0.10664013806302312

Member 0 copied from 4

LR=2.89e-04, WD=0.117, DropPath=0.107, Warmup=5 epochs, Batch=256

=====

Epoch 65 Summary:

=====

Time: 157.94s (Avg member: 31.58s)

Population Mean Accuracy: 78.40%

Best Member Accuracy: 79.09%

Mean Batch Size: 256

Mean Learning Rate: 3.74e-04

Mean Weight Decay: 0.077

=====

Epoch 66/70

=====

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

built data in 1.7210960388183594 seconds

LR changed during epoch: 2.95e-07 -> 5.80e-05

total runtime to train this model was 26.624682426452637 seconds

Hyperparameteres for model 0 at epoch 66

lr: 0.00028870516812461714

weight_decay: 0.11684125924288669

drop_path: 0.10664013806302312

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6456139087677 seconds

Loss: 0.1635

Train Accuracy: 94.25%

Test Accuracy: 78.77%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.5897138118743896 seconds

LR changed during epoch: 2.87e-04 -> 2.83e-04

total runtime to train this model was 26.95661187171936 seconds

Hyperparameteres for model 1 at epoch 66

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4479305744171143 seconds

Loss: 0.2541

Train Accuracy: 90.80%

Test Accuracy: 78.19%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.574655294418335 seconds

LR changed during epoch: 2.36e-04 -> 2.26e-04

total runtime to train this model was 26.872638940811157 seconds

Hyperparameteres for model 2 at epoch 66

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4406588077545166 seconds

Loss: 0.2357

Train Accuracy: 91.64%

Test Accuracy: 77.95%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

```
--- Training Member 3 (Batch size: 256) ---
built data in 1.6369824409484863 seconds
LR changed during epoch: 6.49e-05 -> 6.05e-05
total runtime to train this model was 26.653651237487793 seconds
Hyperparameteres for model 3 at epoch 66
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.4090592861175537 seconds
Loss: 0.3483
Train Accuracy: 87.59%
Test Accuracy: 78.39%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6067183017730713 seconds
LR changed during epoch: 1.05e-05 -> 7.08e-06
total runtime to train this model was 26.699777841567993 seconds
Hyperparameteres for model 4 at epoch 66
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4412732124328613 seconds
Loss: 0.1773
Train Accuracy: 93.81%
Test Accuracy: 79.23%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====
Epoch 66 Summary:
=====
Time: 156.59s (Avg member: 31.32s)
Population Mean Accuracy: 78.51%
Best Member Accuracy: 79.23%
Mean Batch Size: 256
Mean Learning Rate: 3.74e-04
Mean Weight Decay: 0.077

=====
Epoch 67/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.598681926727295 seconds
```

LR changed during epoch: 5.80e-05 -> 1.16e-04
total runtime to train this model was 26.69506311416626 seconds
Hyperparameteres for model 0 at epoch 67
lr: 0.00028870516812461714

weight_decay: 0.11684125924288669
drop_path: 0.10664013806302312
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.341787099838257 seconds
Loss: 0.1843
Train Accuracy: 93.48%
Test Accuracy: 78.66%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6453285217285156 seconds
LR changed during epoch: 2.83e-04 -> 2.80e-04
total runtime to train this model was 26.865962743759155 seconds
Hyperparameteres for model 1 at epoch 67
lr: 0.0003043297328772563

weight_decay: 0.05339576526131328
drop_path: 0.020385008657948997
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.626631259918213 seconds
Loss: 0.2453
Train Accuracy: 91.20%
Test Accuracy: 77.58%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.778313159942627 seconds
LR changed during epoch: 2.26e-04 -> 2.16e-04
total runtime to train this model was 26.433053016662598 seconds
Hyperparameteres for model 2 at epoch 67
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983
drop_path: 0.16134746188805799
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3370778560638428 seconds
Loss: 0.2271

Train Accuracy: 91.82%
Test Accuracy: 78.36%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6524419784545898 seconds
LR changed during epoch: 6.05e-05 -> 5.61e-05
total runtime to train this model was 26.890958070755005 seconds
Hyperparameteres for model 3 at epoch 67
lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4852399826049805 seconds
Loss: 0.3396
Train Accuracy: 87.89%
Test Accuracy: 78.58%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6102018356323242 seconds
LR changed during epoch: 7.08e-06 -> 4.42e-06
total runtime to train this model was 26.756093978881836 seconds
Hyperparameteres for model 4 at epoch 67
lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.480909824371338 seconds
Loss: 0.1780
Train Accuracy: 93.75%
Test Accuracy: 79.19%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

=====

Epoch 67 Summary:

=====

Time: 156.45s (Avg member: 31.29s)
Population Mean Accuracy: 78.47%
Best Member Accuracy: 79.19%
Mean Batch Size: 256
Mean Learning Rate: 3.74e-04
Mean Weight Decay: 0.077

=====

Epoch 68/70

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

built data in 1.586747646331787 seconds

LR changed during epoch: 1.16e-04 -> 1.74e-04

total runtime to train this model was 25.983307600021362 seconds

Hyperparameteres for model 0 at epoch 68

lr: 0.00028870516812461714

weight_decay: 0.11684125924288669

drop_path: 0.10664013806302312

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.6864383220672607 seconds

Loss: 0.2086

Train Accuracy: 92.54%

Test Accuracy: 78.03%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.7290940284729004 seconds

LR changed during epoch: 2.80e-04 -> 2.75e-04

total runtime to train this model was 25.406855583190918 seconds

Hyperparameteres for model 1 at epoch 68

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.3241922855377197 seconds

Loss: 0.2353

Train Accuracy: 91.56%

Test Accuracy: 77.75%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.556412935256958 seconds

LR changed during epoch: 2.16e-04 -> 2.06e-04

total runtime to train this model was 25.750954389572144 seconds

Hyperparameteres for model 2 at epoch 68

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4462759494781494 seconds

Loss: 0.2156

Train Accuracy: 92.43%

Test Accuracy: 78.89%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6676418781280518 seconds

LR changed during epoch: 5.61e-05 -> 5.19e-05

total runtime to train this model was 29.49492311477661 seconds

Hyperparameteres for model 3 at epoch 68

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5517351627349854 seconds

Loss: 0.3280

Train Accuracy: 88.19%

Test Accuracy: 78.79%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.762941598892212 seconds

LR changed during epoch: 4.42e-06 -> 2.52e-06

total runtime to train this model was 25.28525424003601 seconds

Hyperparameteres for model 4 at epoch 68

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1873466968536377 seconds

Loss: 0.1754

Train Accuracy: 93.79%

Test Accuracy: 79.20%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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Epoch 68 Summary:

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Time: 155.71s (Avg member: 31.14s)

Population Mean Accuracy: 78.53%

Best Member Accuracy: 79.20%

Mean Batch Size: 256
Mean Learning Rate: 3.74e-04
Mean Weight Decay: 0.077

=====
Epoch 69/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6731977462768555 seconds
LR changed during epoch: 1.74e-04 -> 2.31e-04
total runtime to train this model was 25.801298141479492 seconds
Hyperparameteres for model 0 at epoch 69
lr: 0.00028870516812461714

weight_decay: 0.11684125924288669

drop_path: 0.10664013806302312

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0771496295928955 seconds
Loss: 0.2346
Train Accuracy: 91.49%
Test Accuracy: 77.60%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6082162857055664 seconds
LR changed during epoch: 2.75e-04 -> 2.71e-04
total runtime to train this model was 26.330121517181396 seconds
Hyperparameteres for model 1 at epoch 69
lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6836202144622803 seconds
Loss: 0.2216
Train Accuracy: 91.98%
Test Accuracy: 77.76%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5691375732421875 seconds
LR changed during epoch: 2.06e-04 -> 1.96e-04
total runtime to train this model was 26.325929641723633 seconds
Hyperparameteres for model 2 at epoch 69
lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6891517639160156 seconds

Loss: 0.2040

Train Accuracy: 92.71%

Test Accuracy: 78.64%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.6102733612060547 seconds

LR changed during epoch: 5.19e-05 -> 4.78e-05

total runtime to train this model was 26.643333435058594 seconds

Hyperparameteres for model 3 at epoch 69

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.994166612625122 seconds

Loss: 0.3247

Train Accuracy: 88.44%

Test Accuracy: 79.15%

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Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.598104476928711 seconds

LR changed during epoch: 2.52e-06 -> 1.38e-06

total runtime to train this model was 27.663206100463867 seconds

Hyperparameteres for model 4 at epoch 69

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7506866455078125 seconds

Loss: 0.1769

Train Accuracy: 93.79%

Test Accuracy: 79.17%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

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Epoch 69 Summary:

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```

Time: 157.47s (Avg member: 31.49s)

Population Mean Accuracy: 78.46%

Best Member Accuracy: 79.17%

Mean Batch Size: 256

Mean Learning Rate: 3.74e-04

Mean Weight Decay: 0.077

```
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```

Epoch 70/70

```
=====
```

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

built data in 1.6070656776428223 seconds

LR changed during epoch: 2.31e-04 -> 2.89e-04

total runtime to train this model was 27.42783808708191 seconds

Hyperparameteres for model 0 at epoch 70

lr: 0.00028870516812461714

weight_decay: 0.11684125924288669

drop_path: 0.10664013806302312

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5546460151672363 seconds

Loss: 0.2711

Train Accuracy: 90.19%

Test Accuracy: 77.92%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_207796.pt

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

built data in 1.5924031734466553 seconds

LR changed during epoch: 2.71e-04 -> 2.66e-04

total runtime to train this model was 27.047796964645386 seconds

Hyperparameteres for model 1 at epoch 70

lr: 0.0003043297328772563

weight_decay: 0.05339576526131328

drop_path: 0.020385008657948997

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.0616846084594727 seconds

Loss: 0.2159

Train Accuracy: 92.27%

Test Accuracy: 77.89%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_207796.pt

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

built data in 1.7862658500671387 seconds

LR changed during epoch: 1.96e-04 -> 1.86e-04

total runtime to train this model was 26.46057939529419 seconds

Hyperparameteres for model 2 at epoch 70

lr: 0.00042123243526480484

weight_decay: 0.02887100536714983

drop_path: 0.16134746188805799

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.6687726974487305 seconds

Loss: 0.1964

Train Accuracy: 93.05%

Test Accuracy: 79.06%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_207796.pt

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

built data in 1.5832860469818115 seconds

LR changed during epoch: 4.78e-05 -> 4.38e-05

total runtime to train this model was 26.91649317741394 seconds

Hyperparameteres for model 3 at epoch 70

lr: 0.00019905296708947918

weight_decay: 0.15

drop_path: 0.11388284623645373

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.446340560913086 seconds

Loss: 0.3156

Train Accuracy: 88.75%

Test Accuracy: 78.90%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_207796.pt

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

built data in 1.619377613067627 seconds

LR changed during epoch: 1.38e-06 -> 1.00e-06

total runtime to train this model was 26.788944959640503 seconds

Hyperparameteres for model 4 at epoch 70

lr: 0.0006557364516844356

weight_decay: 0.033785058922093714

drop_path: 0.10388890406522588

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.384007215499878 seconds

Loss: 0.1764

Train Accuracy: 93.87%

Test Accuracy: 79.22%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_207796.pt

--- Population Update (Epoch 70) ---

==== PBT Exploit & Explore ====
Top performers: [79.22]
Bottom performers: [77.89]
Member 1: lr changed from 0.0003043297328772563 to 0.0002341002499457036
Member 1: weight_decay changed from 0.05339576526131328 to 0.0635739306205642
Member 1: drop_path changed from 0.020385008657948997 to 0.0
Member 1 copied from 4
LR=2.34e-04, WD=0.064, DropPath=0.000, Warmup=5 epochs, Batch=256

=====
Epoch 70 Summary:
=====

Time: 157.19s (Avg member: 31.44s)
Population Mean Accuracy: 78.60%
Best Member Accuracy: 79.22%
Mean Batch Size: 256
Mean Learning Rate: 3.60e-04
Mean Weight Decay: 0.079

=====
PBT TRAINING COMPLETE
=====

Best member: 4
Best accuracy: 79.22%

Best hyperparameters:
Learning Rate: 6.56e-04
Weight Decay: 0.034
Drop Path Rate: 0.104
Warmup Epochs: 5
Batch Size: 256

=====
PBT TIMING REPORT
=====

Overall Statistics	Value
Total runtime	11087.88s (184.80 min)
Number of epochs	70
Number of population updates	14

Epoch Timing	Value
Average epoch time	158.39s
Std epoch time	1.81s
Min epoch time	155.12s (epoch 20)
Max epoch time	162.02s (epoch 7)

Member Training Timing	Value
Average member time per epoch	31.68s
Total training time	11087.17s
Training efficiency	100.0%

Population Update Timing	Value
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Average update time	0.01s
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Total update time	0.19s
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Update efficiency	0.0%
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Batch Size Analysis	Avg Time	Samples
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Batch size 256	31.68s	350
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Per-Member Statistics	Avg Time	Total Time
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Member 0	31.66s	2216.35s
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Member 1	31.70s	2218.92s
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Member 2	31.67s	2216.85s
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Member 3	31.73s	2221.32s
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Member 4	31.62s	2213.72s
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Experiment completed successfully!

Results saved to: pbt_vit_timing_results.png

Detailed timing saved to: pbt_detailed_timing.png