

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 1.650071620941162 seconds
/tmp/ipython-input-228132033.py:694: FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch.
with torch.cuda.amp.autocast(enabled=torch.cuda.is_available()):`
LR changed during epoch: 5.25e-07 -> 1.03e-04
total runtime to train this model was 26.856104850769043 seconds
Hyperparameteres for model 0 at epoch 1
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5337374210357666 seconds
Loss: 1.9989
Train Accuracy: 25.98%
Test Accuracy: 30.04%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7577900886535645 seconds
LR changed during epoch: 3.65e-07 -> 7.19e-05
total runtime to train this model was 27.447462558746338 seconds
Hyperparameteres for model 1 at epoch 1
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6866798400878906 seconds
Loss: 2.0203

Train Accuracy: 24.62%
Test Accuracy: 30.21%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7462785243988037 seconds
LR changed during epoch: 8.09e-07 -> 1.59e-04
total runtime to train this model was 27.409847021102905 seconds
Hyperparameteres for model 2 at epoch 1
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.553689479827881 seconds
Loss: 1.9700
Train Accuracy: 26.12%
Test Accuracy: 32.60%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6273033618927002 seconds
LR changed during epoch: 1.38e-07 -> 2.72e-05
total runtime to train this model was 27.53993582725525 seconds
Hyperparameteres for model 3 at epoch 1
lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4957258701324463 seconds
Loss: 2.0654
Train Accuracy: 23.07%
Test Accuracy: 28.21%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6713528633117676 seconds
LR changed during epoch: 1.10e-07 -> 2.17e-05
total runtime to train this model was 27.467177867889404 seconds
Hyperparameteres for model 4 at epoch 1
lr: 0.00010792612041551053

weight_decay: 0.07255494650380867

drop_path: 0.15745512084515645

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.025236129760742 seconds

Loss: 2.0754

Train Accuracy: 22.36%

Test Accuracy: 26.14%

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Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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Epoch 1 Summary:

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Time: 160.77s (Avg member: 32.15s)

Population Mean Accuracy: 29.44%

Best Member Accuracy: 32.60%

Mean Batch Size: 256

Mean Learning Rate: 3.82e-04

Mean Weight Decay: 0.085

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Epoch 2/70

=====

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

built data in 1.859189748764038 seconds

LR changed during epoch: 1.03e-04 -> 2.06e-04

total runtime to train this model was 27.089317560195923 seconds

Hyperparameteres for model 0 at epoch 2

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.574761152267456 seconds

Loss: 1.7700

Train Accuracy: 33.94%

Test Accuracy: 34.05%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.680152177810669 seconds

LR changed during epoch: 7.19e-05 -> 1.43e-04

total runtime to train this model was 26.83544683456421 seconds

Hyperparameteres for model 1 at epoch 2

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5294389724731445 seconds

Loss: 1.8068

Train Accuracy: 32.74%

Test Accuracy: 33.83%

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Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6563739776611328 seconds

LR changed during epoch: 1.59e-04 -> 3.18e-04

total runtime to train this model was 27.2827889919281 seconds

Hyperparameteres for model 2 at epoch 2

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6907715797424316 seconds

Loss: 1.7471

Train Accuracy: 34.64%

Test Accuracy: 37.20%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.8332653045654297 seconds

LR changed during epoch: 2.72e-05 -> 5.43e-05

total runtime to train this model was 27.52945566177368 seconds

Hyperparameteres for model 3 at epoch 2

lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.02270770072937 seconds

Loss: 1.8446

Train Accuracy: 31.68%

Test Accuracy: 30.64%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6228010654449463 seconds

LR changed during epoch: 2.17e-05 -> 4.33e-05

total runtime to train this model was 27.31903314590454 seconds

Hyperparameteres for model 4 at epoch 2

lr: 0.00010792612041551053

weight_decay: 0.07255494650380867

drop_path: 0.15745512084515645

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4759504795074463 seconds

Loss: 1.8633

Train Accuracy: 30.92%

Test Accuracy: 32.38%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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Epoch 2 Summary:

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Time: 159.26s (Avg member: 31.85s)

Population Mean Accuracy: 33.62%

Best Member Accuracy: 37.20%

Mean Batch Size: 256

Mean Learning Rate: 3.82e-04

Mean Weight Decay: 0.085

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Epoch 3/70

=====

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

built data in 1.6587412357330322 seconds

LR changed during epoch: 2.06e-04 -> 3.09e-04

total runtime to train this model was 27.077128887176514 seconds

Hyperparameteres for model 0 at epoch 3

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.495042085647583 seconds

Loss: 1.6286

Train Accuracy: 40.10%

Test Accuracy: 42.61%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.7350389957427979 seconds

LR changed during epoch: 1.43e-04 -> 2.15e-04

total runtime to train this model was 26.36118221282959 seconds

Hyperparameteres for model 1 at epoch 3

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.468053102493286 seconds

Loss: 1.6882

Train Accuracy: 37.59%

Test Accuracy: 38.18%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6787798404693604 seconds

LR changed during epoch: 3.18e-04 -> 4.77e-04

total runtime to train this model was 27.049002647399902 seconds

Hyperparameteres for model 2 at epoch 3

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4947402477264404 seconds

Loss: 1.6063

Train Accuracy: 41.11%

Test Accuracy: 45.35%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6107869148254395 seconds

LR changed during epoch: 5.43e-05 -> 8.14e-05

total runtime to train this model was 27.385764122009277 seconds

Hyperparameteres for model 3 at epoch 3

lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.514833450317383 seconds

Loss: 1.7511

Train Accuracy: 35.18%

Test Accuracy: 34.87%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6240103244781494 seconds
LR changed during epoch: 4.33e-05 -> 6.49e-05
total runtime to train this model was 27.035648107528687 seconds
Hyperparameteres for model 4 at epoch 3
lr: 0.00010792612041551053

weight_decay: 0.07255494650380867
drop_path: 0.15745512084515645
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.508769989013672 seconds
Loss: 1.7769
Train Accuracy: 34.18%
Test Accuracy: 36.26%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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Epoch 3 Summary:
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Time: 157.98s (Avg member: 31.60s)
Population Mean Accuracy: 39.45%
Best Member Accuracy: 45.35%
Mean Batch Size: 256
Mean Learning Rate: 3.82e-04
Mean Weight Decay: 0.085

=====
Epoch 4/70
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--- Training Member 0 (Batch size: 256) ---
built data in 1.8219904899597168 seconds
LR changed during epoch: 3.09e-04 -> 4.12e-04
total runtime to train this model was 26.818915367126465 seconds
Hyperparameteres for model 0 at epoch 4
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545
drop_path: 0.008490195628463093
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3066272735595703 seconds
Loss: 1.5139
Train Accuracy: 44.85%
Test Accuracy: 48.10%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5997803211212158 seconds
LR changed during epoch: 2.15e-04 -> 2.87e-04

total runtime to train this model was 27.119672060012817 seconds

Hyperparameteres for model 1 at epoch 4

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.545295476913452 seconds

Loss: 1.5773

Train Accuracy: 42.11%

Test Accuracy: 43.76%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6138341426849365 seconds

LR changed during epoch: 4.77e-04 -> 6.35e-04

total runtime to train this model was 27.032065868377686 seconds

Hyperparameteres for model 2 at epoch 4

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.487348794937134 seconds

Loss: 1.5185

Train Accuracy: 44.45%

Test Accuracy: 48.08%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.7101423740386963 seconds

LR changed during epoch: 8.14e-05 -> 1.08e-04

total runtime to train this model was 26.873156785964966 seconds

Hyperparameteres for model 3 at epoch 4

lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.784769296646118 seconds

Loss: 1.6708

Train Accuracy: 38.54%

Test Accuracy: 38.58%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5700955390930176 seconds
LR changed during epoch: 6.49e-05 -> 8.65e-05
total runtime to train this model was 26.973588943481445 seconds
Hyperparameteres for model 4 at epoch 4
lr: 0.00010792612041551053

weight_decay: 0.07255494650380867
drop_path: 0.15745512084515645
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5068793296813965 seconds
Loss: 1.7092
Train Accuracy: 36.79%
Test Accuracy: 37.85%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====
Epoch 4 Summary:
=====

Time: 159.00s (Avg member: 31.80s)
Population Mean Accuracy: 43.27%
Best Member Accuracy: 48.10%
Mean Batch Size: 256
Mean Learning Rate: 3.82e-04
Mean Weight Decay: 0.085

=====
Epoch 5/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5843663215637207 seconds
LR changed during epoch: 4.12e-04 -> 5.14e-04
total runtime to train this model was 27.171802043914795 seconds
Hyperparameteres for model 0 at epoch 5
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545
drop_path: 0.008490195628463093
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4952335357666016 seconds
Loss: 1.4327
Train Accuracy: 47.95%
Test Accuracy: 48.51%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5729949474334717 seconds

LR changed during epoch: 2.87e-04 -> 3.58e-04

total runtime to train this model was 27.11464548110962 seconds

Hyperparameteres for model 1 at epoch 5

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.6198136806488037 seconds

Loss: 1.4940

Train Accuracy: 45.08%

Test Accuracy: 46.10%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.8867719173431396 seconds

LR changed during epoch: 6.35e-04 -> 7.93e-04

total runtime to train this model was 26.77736806869507 seconds

Hyperparameteres for model 2 at epoch 5

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.056175470352173 seconds

Loss: 1.4663

Train Accuracy: 46.72%

Test Accuracy: 44.67%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.5732612609863281 seconds

LR changed during epoch: 1.08e-04 -> 1.35e-04

total runtime to train this model was 27.379560232162476 seconds

Hyperparameteres for model 3 at epoch 5

lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5413873195648193 seconds
Loss: 1.5969
Train Accuracy: 41.42%
Test Accuracy: 42.26%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6569411754608154 seconds
LR changed during epoch: 8.65e-05 -> 1.08e-04
total runtime to train this model was 26.908342838287354 seconds
Hyperparameteres for model 4 at epoch 5
lr: 0.00010792612041551053

weight_decay: 0.07255494650380867

drop_path: 0.15745512084515645

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.435291051864624 seconds
Loss: 1.6280
Train Accuracy: 40.20%
Test Accuracy: 41.54%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

==== PBT Exploit & Explore ====
Top performers: [48.51]
Bottom performers: [41.54]
Member 4: lr changed from 0.00010792612041551053 to 0.0001255641363910822
Member 4: weight_decay changed from 0.07255494650380867 to 0.07840653288023229
Member 4: drop_path changed from 0.15745512084515645 to 0.12394432117092266
Member 4 copied from 0
LR=1.26e-04, WD=0.078, DropPath=0.124, Warmup=5 epochs, Batch=256

=====
Epoch 5 Summary:
=====

Time: 158.05s (Avg member: 31.61s)
Population Mean Accuracy: 44.62%
Best Member Accuracy: 48.51%
Mean Batch Size: 256
Mean Learning Rate: 3.85e-04
Mean Weight Decay: 0.086

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.623244285583496 seconds
LR changed during epoch: 5.14e-04 -> 5.14e-04
total runtime to train this model was 26.70108461380005 seconds
Hyperparameteres for model 0 at epoch 6

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6346211433410645 seconds

Loss: 1.3689

Train Accuracy: 50.26%

Test Accuracy: 51.47%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6906383037567139 seconds

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

total runtime to train this model was 27.15669012069702 seconds

Hyperparameteres for model 1 at epoch 6

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5206124782562256 seconds

Loss: 1.4173

Train Accuracy: 48.78%

Test Accuracy: 50.13%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6183078289031982 seconds

LR changed during epoch: 7.93e-04 -> 7.93e-04

total runtime to train this model was 27.1208176612854 seconds

Hyperparameteres for model 2 at epoch 6

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.436779260635376 seconds

Loss: 1.4128

Train Accuracy: 48.98%

Test Accuracy: 49.77%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6494874954223633 seconds

LR changed during epoch: 1.35e-04 -> 1.35e-04

total runtime to train this model was 27.15052032470703 seconds

Hyperparameteres for model 3 at epoch 6

lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.791513204574585 seconds

Loss: 1.5039

Train Accuracy: 45.37%

Test Accuracy: 46.62%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.73061203956604 seconds

LR changed during epoch: 1.28e-07 -> 2.52e-05

total runtime to train this model was 26.574405670166016 seconds

Hyperparameteres for model 4 at epoch 6

lr: 0.0001255641363910822

weight_decay: 0.07840653288023229

drop_path: 0.12394432117092266

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.0950984954833984 seconds

Loss: 1.3366

Train Accuracy: 51.86%

Test Accuracy: 53.64%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 6 Summary:

=====

Time: 158.85s (Avg member: 31.77s)

Population Mean Accuracy: 50.33%

Best Member Accuracy: 53.64%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.086

=====

Epoch 7/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6546626091003418 seconds
LR changed during epoch: 5.14e-04 -> 5.13e-04
total runtime to train this model was 26.972341299057007 seconds
Hyperparameteres for model 0 at epoch 7
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5891244411468506 seconds

Loss: 1.3149

Train Accuracy: 52.44%

Test Accuracy: 54.13%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.602367877960205 seconds

LR changed during epoch: 3.58e-04 -> 3.57e-04

total runtime to train this model was 26.829878568649292 seconds

Hyperparameteres for model 1 at epoch 7

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5147640705108643 seconds

Loss: 1.3619

Train Accuracy: 51.12%

Test Accuracy: 51.45%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6220512390136719 seconds

LR changed during epoch: 7.93e-04 -> 7.91e-04

total runtime to train this model was 26.671940088272095 seconds

Hyperparameteres for model 2 at epoch 7

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.6045491695404053 seconds

Loss: 1.3656

Train Accuracy: 50.11%

Test Accuracy: 52.23%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6371989250183105 seconds

LR changed during epoch: 1.35e-04 -> 1.35e-04

total runtime to train this model was 27.151641607284546 seconds

Hyperparameteres for model 3 at epoch 7

lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.470655679702759 seconds

Loss: 1.4282

Train Accuracy: 48.02%

Test Accuracy: 48.87%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6135671138763428 seconds

LR changed during epoch: 2.52e-05 -> 5.04e-05

total runtime to train this model was 27.196842908859253 seconds

Hyperparameteres for model 4 at epoch 7

lr: 0.0001255641363910822

weight_decay: 0.07840653288023229

drop_path: 0.12394432117092266

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4662559032440186 seconds

Loss: 1.2804

Train Accuracy: 53.65%

Test Accuracy: 54.03%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 7 Summary:

=====

Time: 157.92s (Avg member: 31.58s)

Population Mean Accuracy: 52.14%

Best Member Accuracy: 54.13%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.086

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

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

built data in 1.606628656387329 seconds

LR changed during epoch: 5.13e-04 -> 5.11e-04

total runtime to train this model was 27.008315324783325 seconds

Hyperparameteres for model 0 at epoch 8

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5876641273498535 seconds

Loss: 1.2718

Train Accuracy: 54.14%

Test Accuracy: 55.85%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.7145893573760986 seconds

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

total runtime to train this model was 27.004119157791138 seconds

Hyperparameteres for model 1 at epoch 8

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.2317304611206055 seconds

Loss: 1.3114

Train Accuracy: 52.51%

Test Accuracy: 52.81%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5853371620178223 seconds

LR changed during epoch: 7.91e-04 -> 7.89e-04

total runtime to train this model was 27.524155616760254 seconds

Hyperparameteres for model 2 at epoch 8

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.571004629135132 seconds

Loss: 1.3130

Train Accuracy: 52.32%

Test Accuracy: 53.14%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.597689151763916 seconds

LR changed during epoch: 1.35e-04 -> 1.35e-04

total runtime to train this model was 26.769646644592285 seconds

Hyperparameteres for model 3 at epoch 8

lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.51653790473938 seconds

Loss: 1.3784

Train Accuracy: 49.86%

Test Accuracy: 50.79%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6019372940063477 seconds

LR changed during epoch: 5.04e-05 -> 7.55e-05

total runtime to train this model was 26.419850826263428 seconds

Hyperparameteres for model 4 at epoch 8

lr: 0.0001255641363910822

weight_decay: 0.07840653288023229

drop_path: 0.12394432117092266

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.243762493133545 seconds

Loss: 1.2539

Train Accuracy: 54.88%

Test Accuracy: 56.44%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 8 Summary:

=====

Time: 158.34s (Avg member: 31.67s)

Population Mean Accuracy: 53.81%

Best Member Accuracy: 56.44%

Mean Batch Size: 256

Mean Learning Rate: 3.85e-04

Mean Weight Decay: 0.086

=====

Epoch 9/70

=====

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

built data in 1.722424030303955 seconds

LR changed during epoch: 5.11e-04 -> 5.09e-04

total runtime to train this model was 27.999516487121582 seconds

Hyperparameteres for model 0 at epoch 9

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.402869462966919 seconds

Loss: 1.2315

Train Accuracy: 55.47%

Test Accuracy: 55.96%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.570971965789795 seconds

LR changed during epoch: 3.56e-04 -> 3.54e-04

total runtime to train this model was 26.93640375137329 seconds

Hyperparameteres for model 1 at epoch 9

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5164761543273926 seconds

Loss: 1.2681

Train Accuracy: 54.27%

Test Accuracy: 56.02%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6039705276489258 seconds

LR changed during epoch: 7.89e-04 -> 7.86e-04

total runtime to train this model was 27.172983646392822 seconds

Hyperparameteres for model 2 at epoch 9

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6974596977233887 seconds

Loss: 1.2730

Train Accuracy: 54.00%

Test Accuracy: 54.22%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.8014349937438965 seconds

LR changed during epoch: 1.35e-04 -> 1.34e-04

total runtime to train this model was 27.42127299308777 seconds

Hyperparameteres for model 3 at epoch 9

lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.134512186050415 seconds

Loss: 1.3261

Train Accuracy: 51.89%

Test Accuracy: 52.56%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.677537202835083 seconds

LR changed during epoch: 7.55e-05 -> 1.01e-04

total runtime to train this model was 27.219808101654053 seconds

Hyperparameteres for model 4 at epoch 9

lr: 0.0001255641363910822

weight_decay: 0.07840653288023229

drop_path: 0.12394432117092266

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.521641492843628 seconds

Loss: 1.2360

Train Accuracy: 55.43%

Test Accuracy: 56.52%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

Time: 159.65s (Avg member: 31.93s)
Population Mean Accuracy: 55.06%
Best Member Accuracy: 56.52%
Mean Batch Size: 256
Mean Learning Rate: 3.85e-04
Mean Weight Decay: 0.086

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.5771543979644775 seconds
LR changed during epoch: 5.09e-04 -> 5.07e-04
total runtime to train this model was 27.042463541030884 seconds
Hyperparameteres for model 0 at epoch 10
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.516789674758911 seconds

Loss: 1.1958
Train Accuracy: 56.97%
Test Accuracy: 57.64%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.7854077816009521 seconds
LR changed during epoch: 3.54e-04 -> 3.53e-04
total runtime to train this model was 26.69686245918274 seconds
Hyperparameteres for model 1 at epoch 10
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.575004816055298 seconds

Loss: 1.2255
Train Accuracy: 55.89%
Test Accuracy: 55.49%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5529110431671143 seconds
LR changed during epoch: 7.86e-04 -> 7.82e-04
total runtime to train this model was 26.621859073638916 seconds
Hyperparameteres for model 2 at epoch 10
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4518160820007324 seconds
Loss: 1.2244
Train Accuracy: 55.84%
Test Accuracy: 57.30%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.601029634475708 seconds
LR changed during epoch: 1.34e-04 -> 1.33e-04
total runtime to train this model was 26.62002730369568 seconds
Hyperparameteres for model 3 at epoch 10
lr: 0.00013540985011933887

weight_decay: 0.1459210426628943

drop_path: 0.10535528042233536

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4691195487976074 seconds
Loss: 1.2863
Train Accuracy: 53.44%
Test Accuracy: 54.81%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6071953773498535 seconds
LR changed during epoch: 1.01e-04 -> 1.26e-04
total runtime to train this model was 26.714797019958496 seconds
Hyperparameteres for model 4 at epoch 10
lr: 0.0001255641363910822

weight_decay: 0.07840653288023229

drop_path: 0.12394432117092266

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.474411964416504 seconds

Loss: 1.2190
Train Accuracy: 55.99%
Test Accuracy: 56.19%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

==== PBT Exploit & Explore ====
Top performers: [57.64]
Bottom performers: [54.81]
Member 3: lr changed from 0.00013540985011933887 to 0.00010000000000000009
Member 3: weight_decay changed from 0.1459210426628943 to 0.15
Member 3: drop_path changed from 0.10535528042233536 to 0.13362375815606253
Member 3 copied from 0
LR=1.00e-04, WD=0.150, DropPath=0.134, Warmup=5 epochs, Batch=256

=====
Epoch 10 Summary:
=====

Time: 156.51s (Avg member: 31.30s)
Population Mean Accuracy: 56.29%
Best Member Accuracy: 57.64%
Mean Batch Size: 256
Mean Learning Rate: 3.78e-04
Mean Weight Decay: 0.087

=====
Epoch 11/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.7756502628326416 seconds
LR changed during epoch: 5.07e-04 -> 5.03e-04
total runtime to train this model was 26.740845203399658 seconds
Hyperparameteres for model 0 at epoch 11
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545
drop_path: 0.008490195628463093
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.357891798019409 seconds

Loss: 1.1522
Train Accuracy: 58.74%
Test Accuracy: 58.48%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5836224555969238 seconds
LR changed during epoch: 3.53e-04 -> 3.50e-04
total runtime to train this model was 26.887000560760498 seconds
Hyperparameteres for model 1 at epoch 11
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.487508535385132 seconds

Loss: 1.1862

Train Accuracy: 57.46%

Test Accuracy: 57.67%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5996274948120117 seconds

LR changed during epoch: 7.82e-04 -> 7.77e-04

total runtime to train this model was 26.64268946647644 seconds

Hyperparameteres for model 2 at epoch 11

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.482344627380371 seconds

Loss: 1.1888

Train Accuracy: 57.21%

Test Accuracy: 58.45%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.5799190998077393 seconds

LR changed during epoch: 1.02e-07 -> 2.01e-05

total runtime to train this model was 27.160449981689453 seconds

Hyperparameteres for model 3 at epoch 11

lr: 0.00010000000000000009

weight_decay: 0.15

drop_path: 0.13362375815606253

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.925957441329956 seconds

Loss: 1.1179

Train Accuracy: 60.03%

Test Accuracy: 60.92%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.798110008239746 seconds
LR changed during epoch: 1.26e-04 -> 1.25e-04
total runtime to train this model was 26.62566328048706 seconds
Hyperparameteres for model 4 at epoch 11
lr: 0.0001255641363910822

weight_decay: 0.07840653288023229

drop_path: 0.12394432117092266

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8692233562469482 seconds

Loss: 1.2062
Train Accuracy: 56.30%
Test Accuracy: 57.39%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

Time: 157.77s (Avg member: 31.55s)
Population Mean Accuracy: 58.58%
Best Member Accuracy: 60.92%
Mean Batch Size: 256
Mean Learning Rate: 3.78e-04
Mean Weight Decay: 0.087

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.5845792293548584 seconds
LR changed during epoch: 5.03e-04 -> 5.00e-04
total runtime to train this model was 27.102880477905273 seconds
Hyperparameteres for model 0 at epoch 12
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.531517267227173 seconds
Loss: 1.1139
Train Accuracy: 60.38%
Test Accuracy: 59.46%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.596543312072754 seconds
LR changed during epoch: 3.50e-04 -> 3.48e-04

total runtime to train this model was 26.683773517608643 seconds

Hyperparameteres for model 1 at epoch 12

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.561401128768921 seconds

Loss: 1.1534

Train Accuracy: 58.52%

Test Accuracy: 59.43%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5998024940490723 seconds

LR changed during epoch: 7.77e-04 -> 7.71e-04

total runtime to train this model was 26.84287166595459 seconds

Hyperparameteres for model 2 at epoch 12

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.387845039367676 seconds

Loss: 1.1358

Train Accuracy: 59.24%

Test Accuracy: 58.42%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6832618713378906 seconds

LR changed during epoch: 2.01e-05 -> 4.01e-05

total runtime to train this model was 27.20275354385376 seconds

Hyperparameteres for model 3 at epoch 12

lr: 0.00010000000000000009

weight_decay: 0.15

drop_path: 0.13362375815606253

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.560075521469116 seconds

Loss: 1.0650

Train Accuracy: 62.04%

Test Accuracy: 61.93%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5626192092895508 seconds
LR changed during epoch: 1.25e-04 -> 1.25e-04
total runtime to train this model was 26.998152256011963 seconds
Hyperparameteres for model 4 at epoch 12
lr: 0.0001255641363910822

weight_decay: 0.07840653288023229
drop_path: 0.12394432117092266
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.504807472229004 seconds
Loss: 1.1770
Train Accuracy: 57.67%
Test Accuracy: 58.08%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====
Epoch 12 Summary:
=====

Time: 157.68s (Avg member: 31.54s)
Population Mean Accuracy: 59.46%
Best Member Accuracy: 61.93%
Mean Batch Size: 256
Mean Learning Rate: 3.78e-04
Mean Weight Decay: 0.087

=====
Epoch 13/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.604261875152588 seconds
LR changed during epoch: 5.00e-04 -> 4.95e-04
total runtime to train this model was 26.61841058731079 seconds
Hyperparameteres for model 0 at epoch 13
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545
drop_path: 0.008490195628463093
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.882129669189453 seconds
Loss: 1.0777
Train Accuracy: 61.56%
Test Accuracy: 60.92%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.7403509616851807 seconds

LR changed during epoch: 3.48e-04 -> 3.45e-04

total runtime to train this model was 27.25036931037903 seconds

Hyperparameteres for model 1 at epoch 13

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.884913921356201 seconds

Loss: 1.1207

Train Accuracy: 59.76%

Test Accuracy: 60.75%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6213691234588623 seconds

LR changed during epoch: 7.71e-04 -> 7.64e-04

total runtime to train this model was 27.34368109703064 seconds

Hyperparameteres for model 2 at epoch 13

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.530684232711792 seconds

Loss: 1.0977

Train Accuracy: 60.87%

Test Accuracy: 61.57%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.605724573135376 seconds

LR changed during epoch: 4.01e-05 -> 6.01e-05

total runtime to train this model was 27.9185631275177 seconds

Hyperparameteres for model 3 at epoch 13

lr: 0.00010000000000000009

weight_decay: 0.15

drop_path: 0.13362375815606253

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.648676872253418 seconds
Loss: 1.0430
Train Accuracy: 62.52%
Test Accuracy: 62.22%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.8560254573822021 seconds
LR changed during epoch: 1.25e-04 -> 1.25e-04
total runtime to train this model was 27.665031909942627 seconds
Hyperparameteres for model 4 at epoch 13
lr: 0.0001255641363910822

weight_decay: 0.07840653288023229

drop_path: 0.12394432117092266

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.039983034133911 seconds
Loss: 1.1545
Train Accuracy: 58.54%
Test Accuracy: 59.36%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 13 Summary:

=====

Time: 160.47s (Avg member: 32.09s)
Population Mean Accuracy: 60.96%
Best Member Accuracy: 62.22%
Mean Batch Size: 256
Mean Learning Rate: 3.78e-04
Mean Weight Decay: 0.087

=====

Epoch 14/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6860408782958984 seconds
LR changed during epoch: 4.95e-04 -> 4.90e-04
total runtime to train this model was 27.631969928741455 seconds
Hyperparameteres for model 0 at epoch 14
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.476729393005371 seconds
Loss: 1.0480
Train Accuracy: 62.73%
Test Accuracy: 61.80%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6032567024230957 seconds
LR changed during epoch: 3.45e-04 -> 3.41e-04
total runtime to train this model was 26.902204036712646 seconds
Hyperparameteres for model 1 at epoch 14
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622
drop_path: 0.16173938523674203
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.509840965270996 seconds
Loss: 1.0887
Train Accuracy: 61.16%
Test Accuracy: 62.64%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.746852159500122 seconds
LR changed during epoch: 7.64e-04 -> 7.56e-04
total runtime to train this model was 26.29513430595398 seconds
Hyperparameteres for model 2 at epoch 14
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5069217681884766 seconds
Loss: 1.0621
Train Accuracy: 61.97%
Test Accuracy: 62.55%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6387054920196533 seconds
LR changed during epoch: 6.01e-05 -> 8.01e-05
total runtime to train this model was 26.714191675186157 seconds
Hyperparameteres for model 3 at epoch 14
lr: 0.000100000000000000009

weight_decay: 0.15

drop_path: 0.13362375815606253

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.508502960205078 seconds

Loss: 1.0356

Train Accuracy: 63.25%

Test Accuracy: 63.08%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.5820672512054443 seconds

LR changed during epoch: 1.25e-04 -> 1.24e-04

total runtime to train this model was 26.98514413833618 seconds

Hyperparameteres for model 4 at epoch 14

lr: 0.0001255641363910822

weight_decay: 0.07840653288023229

drop_path: 0.12394432117092266

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.469547986984253 seconds

Loss: 1.1308

Train Accuracy: 59.53%

Test Accuracy: 60.54%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 14 Summary:

=====

Time: 157.49s (Avg member: 31.50s)

Population Mean Accuracy: 62.12%

Best Member Accuracy: 63.08%

Mean Batch Size: 256

Mean Learning Rate: 3.78e-04

Mean Weight Decay: 0.087

=====

Epoch 15/70

=====

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

built data in 1.6022844314575195 seconds

LR changed during epoch: 4.90e-04 -> 4.85e-04

total runtime to train this model was 26.788801908493042 seconds

Hyperparameteres for model 0 at epoch 15

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.952545166015625 seconds
Loss: 1.0270
Train Accuracy: 63.47%
Test Accuracy: 61.36%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6920952796936035 seconds
LR changed during epoch: 3.41e-04 -> 3.37e-04
total runtime to train this model was 25.97405481338501 seconds
Hyperparameteres for model 1 at epoch 15
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622
drop_path: 0.16173938523674203

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2436630725860596 seconds
Loss: 1.0554
Train Accuracy: 62.51%
Test Accuracy: 63.35%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6015589237213135 seconds
LR changed during epoch: 7.56e-04 -> 7.48e-04
total runtime to train this model was 27.10781502723694 seconds
Hyperparameteres for model 2 at epoch 15
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.533043622970581 seconds
Loss: 1.0234
Train Accuracy: 63.39%
Test Accuracy: 63.29%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5799696445465088 seconds
LR changed during epoch: 8.01e-05 -> 1.00e-04
total runtime to train this model was 27.054898500442505 seconds

Hyperparameteres for model 3 at epoch 15

lr: 0.00010000000000000009

weight_decay: 0.15

drop_path: 0.13362375815606253

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4269182682037354 seconds

Loss: 1.0252

Train Accuracy: 63.54%

Test Accuracy: 63.24%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.7044076919555664 seconds

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

total runtime to train this model was 26.626514434814453 seconds

Hyperparameteres for model 4 at epoch 15

lr: 0.0001255641363910822

weight_decay: 0.07840653288023229

drop_path: 0.12394432117092266

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.3998513221740723 seconds

Loss: 1.1051

Train Accuracy: 60.61%

Test Accuracy: 60.51%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

==== PBT Exploit & Explore ===

Top performers: [63.35]

Bottom performers: [60.51]

Member 4: lr changed from 0.0001255641363910822 to 0.0001726418806765435

Member 4: weight_decay changed from 0.07840653288023229 to 0.06627424087925579

Member 4: drop_path changed from 0.12394432117092266 to 0.08878646004007172

Member 4 copied from 1

LR=1.73e-04, WD=0.066, DropPath=0.089, Warmup=5 epochs, Batch=256

=====

Epoch 15 Summary:

=====

Time: 157.62s (Avg member: 31.52s)

Population Mean Accuracy: 62.35%

Best Member Accuracy: 63.35%

Mean Batch Size: 256

Mean Learning Rate: 3.88e-04

Mean Weight Decay: 0.084

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

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

built data in 1.6394829750061035 seconds

LR changed during epoch: 4.85e-04 -> 4.79e-04

total runtime to train this model was 26.72383713722229 seconds

Hyperparameteres for model 0 at epoch 16

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.407855272293091 seconds

Loss: 0.9973

Train Accuracy: 64.54%

Test Accuracy: 62.98%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5651576519012451 seconds

LR changed during epoch: 3.37e-04 -> 3.33e-04

total runtime to train this model was 26.41739559173584 seconds

Hyperparameteres for model 1 at epoch 16

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.453613042831421 seconds

Loss: 1.0347

Train Accuracy: 63.22%

Test Accuracy: 64.14%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5651497840881348 seconds

LR changed during epoch: 7.48e-04 -> 7.39e-04

total runtime to train this model was 26.511650323867798 seconds

Hyperparameteres for model 2 at epoch 16

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

Population Mean Accuracy: 64.21%

Best Member Accuracy: 65.61%

Mean Batch Size: 256

Mean Learning Rate: 3.88e-04

Mean Weight Decay: 0.084

=====

Epoch 17/70

=====

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

built data in 1.5829668045043945 seconds

LR changed during epoch: 4.79e-04 -> 4.72e-04

total runtime to train this model was 26.631537199020386 seconds

Hyperparameteres for model 0 at epoch 17

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.7995433807373047 seconds

Loss: 0.9717

Train Accuracy: 65.52%

Test Accuracy: 64.98%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5497221946716309 seconds

LR changed during epoch: 3.33e-04 -> 3.29e-04

total runtime to train this model was 26.41670274734497 seconds

Hyperparameteres for model 1 at epoch 17

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4127917289733887 seconds

Loss: 1.0083

Train Accuracy: 64.28%

Test Accuracy: 65.11%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.7289788722991943 seconds

LR changed during epoch: 7.39e-04 -> 7.28e-04

total runtime to train this model was 26.848830461502075 seconds

Hyperparameteres for model 2 at epoch 17

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2250566482543945 seconds

Loss: 0.9636

Train Accuracy: 65.52%

Test Accuracy: 65.14%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.552483320236206 seconds

LR changed during epoch: 9.99e-05 -> 9.98e-05

total runtime to train this model was 26.784295558929443 seconds

Hyperparameteres for model 3 at epoch 17

lr: 0.00010000000000000009

weight_decay: 0.15

drop_path: 0.13362375815606253

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4273552894592285 seconds

Loss: 1.0007

Train Accuracy: 64.34%

Test Accuracy: 64.04%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6058673858642578 seconds

LR changed during epoch: 3.47e-05 -> 6.92e-05

total runtime to train this model was 27.773701429367065 seconds

Hyperparameteres for model 4 at epoch 17

lr: 0.0001726418806765435

weight_decay: 0.06627424087925579

drop_path: 0.08878646004007172

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.50760817527771 seconds

Loss: 0.9396

Train Accuracy: 66.45%

Test Accuracy: 66.44%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

Time: 157.33s (Avg member: 31.47s)
Population Mean Accuracy: 65.14%
Best Member Accuracy: 66.44%
Mean Batch Size: 256
Mean Learning Rate: 3.88e-04
Mean Weight Decay: 0.084

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.6350221633911133 seconds
LR changed during epoch: 4.72e-04 -> 4.65e-04
total runtime to train this model was 27.184446811676025 seconds
Hyperparameteres for model 0 at epoch 18
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.842597246170044 seconds

Loss: 0.9475
Train Accuracy: 66.35%
Test Accuracy: 65.44%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6034879684448242 seconds
LR changed during epoch: 3.29e-04 -> 3.24e-04
total runtime to train this model was 27.569392204284668 seconds
Hyperparameteres for model 1 at epoch 18
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5744895935058594 seconds

Loss: 0.9811
Train Accuracy: 65.14%
Test Accuracy: 65.02%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5595147609710693 seconds
LR changed during epoch: 7.28e-04 -> 7.18e-04
total runtime to train this model was 27.0283625125885 seconds
Hyperparameteres for model 2 at epoch 18
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.511354923248291 seconds
Loss: 0.9348
Train Accuracy: 66.69%
Test Accuracy: 65.60%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5947496891021729 seconds
LR changed during epoch: 9.98e-05 -> 9.95e-05
total runtime to train this model was 26.838549852371216 seconds
Hyperparameteres for model 3 at epoch 18
lr: 0.00010000000000000009

weight_decay: 0.15

drop_path: 0.13362375815606253

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0976579189300537 seconds
Loss: 0.9784
Train Accuracy: 65.22%
Test Accuracy: 63.86%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6925318241119385 seconds
LR changed during epoch: 6.92e-05 -> 1.04e-04
total runtime to train this model was 27.133513689041138 seconds
Hyperparameteres for model 4 at epoch 18
lr: 0.0001726418806765435

weight_decay: 0.06627424087925579

drop_path: 0.08878646004007172

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5135226249694824 seconds

Loss: 0.9258
Train Accuracy: 67.27%
Test Accuracy: 67.12%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 18 Summary:

=====

Time: 159.63s (Avg member: 31.93s)
Population Mean Accuracy: 65.41%
Best Member Accuracy: 67.12%
Mean Batch Size: 256
Mean Learning Rate: 3.88e-04
Mean Weight Decay: 0.084

=====

Epoch 19/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6454260349273682 seconds
LR changed during epoch: 4.65e-04 -> 4.58e-04
total runtime to train this model was 26.96307921409607 seconds
Hyperparameteres for model 0 at epoch 19
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.453908920288086 seconds

Loss: 0.9216
Train Accuracy: 67.39%
Test Accuracy: 65.85%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.570411205291748 seconds
LR changed during epoch: 3.24e-04 -> 3.18e-04
total runtime to train this model was 27.273193836212158 seconds
Hyperparameteres for model 1 at epoch 19
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.532482862472534 seconds

Loss: 0.9612
Train Accuracy: 65.94%

Test Accuracy: 67.75%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7390193939208984 seconds
LR changed during epoch: 7.18e-04 -> 7.06e-04
total runtime to train this model was 27.30429983139038 seconds
Hyperparameteres for model 2 at epoch 19
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.264448404312134 seconds
Loss: 0.9115
Train Accuracy: 67.38%
Test Accuracy: 67.04%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.582960605621338 seconds
LR changed during epoch: 9.95e-05 -> 9.91e-05
total runtime to train this model was 28.047612190246582 seconds
Hyperparameteres for model 3 at epoch 19
lr: 0.00010000000000000009

weight_decay: 0.15
drop_path: 0.13362375815606253
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.483004331588745 seconds
Loss: 0.9616
Train Accuracy: 65.87%
Test Accuracy: 65.70%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6131644248962402 seconds
LR changed during epoch: 1.04e-04 -> 1.38e-04
total runtime to train this model was 27.27598762512207 seconds
Hyperparameteres for model 4 at epoch 19
lr: 0.0001726418806765435

weight_decay: 0.06627424087925579
drop_path: 0.08878646004007172
warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5702152252197266 seconds

Loss: 0.9217

Train Accuracy: 67.26%

Test Accuracy: 66.01%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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Epoch 19 Summary:

=====

Time: 159.52s (Avg member: 31.90s)

Population Mean Accuracy: 66.47%

Best Member Accuracy: 67.75%

Mean Batch Size: 256

Mean Learning Rate: 3.88e-04

Mean Weight Decay: 0.084

=====

Epoch 20/70

=====

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

built data in 1.6493418216705322 seconds

LR changed during epoch: 4.58e-04 -> 4.50e-04

total runtime to train this model was 27.28168487548828 seconds

Hyperparameteres for model 0 at epoch 20

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.429619312286377 seconds

Loss: 0.9068

Train Accuracy: 67.82%

Test Accuracy: 67.39%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5892207622528076 seconds

LR changed during epoch: 3.18e-04 -> 3.13e-04

total runtime to train this model was 27.163583755493164 seconds

Hyperparameteres for model 1 at epoch 20

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4723994731903076 seconds

Loss: 0.9326

Train Accuracy: 66.97%

Test Accuracy: 67.81%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5661628246307373 seconds

LR changed during epoch: 7.06e-04 -> 6.94e-04

total runtime to train this model was 27.381078958511353 seconds

Hyperparameteres for model 2 at epoch 20

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5505752563476562 seconds

Loss: 0.8816

Train Accuracy: 68.61%

Test Accuracy: 67.69%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6835954189300537 seconds

LR changed during epoch: 9.91e-05 -> 9.86e-05

total runtime to train this model was 27.49526572227478 seconds

Hyperparameteres for model 3 at epoch 20

lr: 0.00010000000000000009

weight_decay: 0.15

drop_path: 0.13362375815606253

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6517982482910156 seconds

Loss: 0.9517

Train Accuracy: 66.30%

Test Accuracy: 65.97%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.576566457748413 seconds

LR changed during epoch: 1.38e-04 -> 1.73e-04

total runtime to train this model was 27.703300952911377 seconds

Hyperparameteres for model 4 at epoch 20

lr: 0.0001726418806765435

weight_decay: 0.06627424087925579

drop_path: 0.08878646004007172

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.47784161567688 seconds

Loss: 0.9241

Train Accuracy: 67.09%

Test Accuracy: 66.40%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

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

Top performers: [67.81]

Bottom performers: [65.97]

Member 3: weight_decay changed from 0.15 to 0.14874813601835002

Member 3: drop_path changed from 0.13362375815606253 to 0.12855657228163686

Member 3 copied from 1

LR=1.00e-04, WD=0.149, DropPath=0.129, Warmup=5 epochs, Batch=256

=====
Epoch 20 Summary:
=====

Time: 160.89s (Avg member: 32.18s)

Population Mean Accuracy: 67.05%

Best Member Accuracy: 67.81%

Mean Batch Size: 256

Mean Learning Rate: 3.88e-04

Mean Weight Decay: 0.084

=====
Epoch 21/70
=====

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

built data in 1.6113905906677246 seconds

LR changed during epoch: 4.50e-04 -> 4.41e-04

total runtime to train this model was 27.52747344970703 seconds

Hyperparameteres for model 0 at epoch 21

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5090444087982178 seconds

Loss: 0.8763

Train Accuracy: 68.83%

Test Accuracy: 67.99%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

```
--- Training Member 1 (Batch size: 256) ---
built data in 1.6494500637054443 seconds
LR changed during epoch: 3.13e-04 -> 3.07e-04
total runtime to train this model was 26.91826057434082 seconds
Hyperparameteres for model 1 at epoch 21
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622
drop_path: 0.16173938523674203
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3913075923919678 seconds
Loss: 0.9087
Train Accuracy: 67.65%
Test Accuracy: 68.35%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.65287446975708 seconds
LR changed during epoch: 6.94e-04 -> 6.81e-04
total runtime to train this model was 28.642873525619507 seconds
Hyperparameteres for model 2 at epoch 21
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.603149175643921 seconds
Loss: 0.8636
Train Accuracy: 69.15%
Test Accuracy: 68.56%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5796730518341064 seconds
LR changed during epoch: 1.02e-07 -> 2.01e-05
total runtime to train this model was 27.85129714012146 seconds
Hyperparameteres for model 3 at epoch 21
lr: 0.00010000000000000009

weight_decay: 0.14874813601835002
drop_path: 0.12855657228163686
warmup_epochs: 5
batch_size: 256
```

_____ end of hyperparam printing _____
evaluation in 2.534816026687622 seconds
Loss: 0.8539
Train Accuracy: 69.85%
Test Accuracy: 69.96%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6594650745391846 seconds
LR changed during epoch: 1.73e-04 -> 1.73e-04
total runtime to train this model was 27.000856161117554 seconds
Hyperparameteres for model 4 at epoch 21
lr: 0.0001726418806765435

weight_decay: 0.06627424087925579

drop_path: 0.08878646004007172

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.844899892807007 seconds
Loss: 0.9149
Train Accuracy: 67.51%
Test Accuracy: 67.08%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 21 Summary:

=====

Time: 162.23s (Avg member: 32.45s)
Population Mean Accuracy: 68.39%
Best Member Accuracy: 69.96%
Mean Batch Size: 256
Mean Learning Rate: 3.88e-04
Mean Weight Decay: 0.084

=====

Epoch 22/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.578183889389038 seconds
LR changed during epoch: 4.41e-04 -> 4.32e-04
total runtime to train this model was 27.854089498519897 seconds
Hyperparameteres for model 0 at epoch 22
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6434454917907715 seconds

Loss: 0.8594
Train Accuracy: 69.39%
Test Accuracy: 68.60%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6610076427459717 seconds
LR changed during epoch: 3.07e-04 -> 3.01e-04
total runtime to train this model was 28.69109034538269 seconds
Hyperparameteres for model 1 at epoch 22
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622
drop_path: 0.16173938523674203
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.574794292449951 seconds
Loss: 0.8880
Train Accuracy: 68.32%
Test Accuracy: 68.35%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.703841209411621 seconds
LR changed during epoch: 6.81e-04 -> 6.67e-04
total runtime to train this model was 28.195075511932373 seconds
Hyperparameteres for model 2 at epoch 22
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2277474403381348 seconds
Loss: 0.8377
Train Accuracy: 70.35%
Test Accuracy: 68.70%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.619065761566162 seconds
LR changed during epoch: 2.01e-05 -> 4.01e-05
total runtime to train this model was 27.866281747817993 seconds
Hyperparameteres for model 3 at epoch 22
lr: 0.00010000000000000009

weight_decay: 0.14874813601835002
drop_path: 0.12855657228163686

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5561721324920654 seconds

Loss: 0.8126

Train Accuracy: 71.46%

Test Accuracy: 70.26%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.5511696338653564 seconds

LR changed during epoch: 1.73e-04 -> 1.72e-04

total runtime to train this model was 27.32955527305603 seconds

Hyperparameteres for model 4 at epoch 22

lr: 0.0001726418806765435

weight_decay: 0.06627424087925579

drop_path: 0.08878646004007172

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4512524604797363 seconds

Loss: 0.9055

Train Accuracy: 67.69%

Test Accuracy: 67.86%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 22 Summary:

=====

Time: 162.70s (Avg member: 32.54s)

Population Mean Accuracy: 68.75%

Best Member Accuracy: 70.26%

Mean Batch Size: 256

Mean Learning Rate: 3.88e-04

Mean Weight Decay: 0.084

=====

Epoch 23/70

=====

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

built data in 1.6584899425506592 seconds

LR changed during epoch: 4.32e-04 -> 4.23e-04

total runtime to train this model was 26.722227573394775 seconds

Hyperparameteres for model 0 at epoch 23

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.546125650405884 seconds
Loss: 0.8417
Train Accuracy: 70.14%
Test Accuracy: 69.25%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5964488983154297 seconds
LR changed during epoch: 3.01e-04 -> 2.94e-04
total runtime to train this model was 27.09397602081299 seconds
Hyperparameteres for model 1 at epoch 23
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.459911823272705 seconds
Loss: 0.8708
Train Accuracy: 69.03%
Test Accuracy: 68.84%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.618457555770874 seconds
LR changed during epoch: 6.67e-04 -> 6.53e-04
total runtime to train this model was 27.86125898361206 seconds
Hyperparameteres for model 2 at epoch 23
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.50565505027771 seconds
Loss: 0.8087
Train Accuracy: 71.10%
Test Accuracy: 69.88%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5860981941223145 seconds
LR changed during epoch: 4.01e-05 -> 6.01e-05
total runtime to train this model was 27.56992506980896 seconds
Hyperparameteres for model 3 at epoch 23

lr: 0.00010000000000000009

weight_decay: 0.14874813601835002

drop_path: 0.12855657228163686

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.321687698364258 seconds

Loss: 0.7971

Train Accuracy: 71.89%

Test Accuracy: 70.67%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6989424228668213 seconds

LR changed during epoch: 1.72e-04 -> 1.72e-04

total runtime to train this model was 28.00525188446045 seconds

Hyperparameteres for model 4 at epoch 23

lr: 0.0001726418806765435

weight_decay: 0.06627424087925579

drop_path: 0.08878646004007172

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5642435550689697 seconds

Loss: 0.8838

Train Accuracy: 68.40%

Test Accuracy: 68.37%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 23 Summary:

=====

Time: 161.11s (Avg member: 32.22s)

Population Mean Accuracy: 69.40%

Best Member Accuracy: 70.67%

Mean Batch Size: 256

Mean Learning Rate: 3.88e-04

Mean Weight Decay: 0.084

=====

Epoch 24/70

=====

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

built data in 1.5810565948486328 seconds

LR changed during epoch: 4.23e-04 -> 4.13e-04

total runtime to train this model was 27.955076456069946 seconds

Hyperparameteres for model 0 at epoch 24

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.573002576828003 seconds

Loss: 0.8184

Train Accuracy: 71.03%

Test Accuracy: 69.86%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5961475372314453 seconds

LR changed during epoch: 2.94e-04 -> 2.88e-04

total runtime to train this model was 27.36171793937683 seconds

Hyperparameteres for model 1 at epoch 24

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.413928270339966 seconds

Loss: 0.8491

Train Accuracy: 69.86%

Test Accuracy: 68.55%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.647378921508789 seconds

LR changed during epoch: 6.53e-04 -> 6.38e-04

total runtime to train this model was 27.797338724136353 seconds

Hyperparameteres for model 2 at epoch 24

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5732550621032715 seconds

Loss: 0.7968

Train Accuracy: 71.51%

Test Accuracy: 70.04%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

```
--- Training Member 3 (Batch size: 256) ---
built data in 1.629558801651001 seconds
LR changed during epoch: 6.01e-05 -> 8.01e-05
total runtime to train this model was 27.716431617736816 seconds
Hyperparameteres for model 3 at epoch 24
lr: 0.00010000000000000009

weight_decay: 0.14874813601835002
drop_path: 0.12855657228163686
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5748348236083984 seconds
Loss: 0.7907
Train Accuracy: 71.93%
Test Accuracy: 70.92%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.600482702255249 seconds
LR changed during epoch: 1.72e-04 -> 1.71e-04
total runtime to train this model was 27.682556629180908 seconds
Hyperparameteres for model 4 at epoch 24
lr: 0.0001726418806765435

weight_decay: 0.06627424087925579
drop_path: 0.08878646004007172
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6629819869995117 seconds
Loss: 0.8716
Train Accuracy: 68.91%
Test Accuracy: 69.60%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====
Epoch 24 Summary:
=====
Time: 162.71s (Avg member: 32.54s)
Population Mean Accuracy: 69.79%
Best Member Accuracy: 70.92%
Mean Batch Size: 256
Mean Learning Rate: 3.88e-04
Mean Weight Decay: 0.084

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.6766889095306396 seconds
```

LR changed during epoch: 4.13e-04 -> 4.03e-04
total runtime to train this model was 27.57547926902771 seconds
Hyperparameteres for model 0 at epoch 25
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.559858798980713 seconds

Loss: 0.8049
Train Accuracy: 71.60%
Test Accuracy: 69.51%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5779569149017334 seconds
LR changed during epoch: 2.88e-04 -> 2.81e-04
total runtime to train this model was 28.062514543533325 seconds
Hyperparameteres for model 1 at epoch 25
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6190266609191895 seconds
Loss: 0.8313
Train Accuracy: 70.58%
Test Accuracy: 69.31%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6694295406341553 seconds
LR changed during epoch: 6.38e-04 -> 6.22e-04
total runtime to train this model was 27.790284633636475 seconds
Hyperparameteres for model 2 at epoch 25
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.634129285812378 seconds
Loss: 0.7714

Train Accuracy: 72.36%
Test Accuracy: 71.11%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5681846141815186 seconds
LR changed during epoch: 8.01e-05 -> 1.00e-04
total runtime to train this model was 27.837728261947632 seconds
Hyperparameteres for model 3 at epoch 25
lr: 0.00010000000000000009

weight_decay: 0.14874813601835002
drop_path: 0.12855657228163686
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5405194759368896 seconds
Loss: 0.7829
Train Accuracy: 72.20%
Test Accuracy: 70.78%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6544406414031982 seconds
LR changed during epoch: 1.71e-04 -> 1.70e-04
total runtime to train this model was 27.474420070648193 seconds
Hyperparameteres for model 4 at epoch 25
lr: 0.0001726418806765435

weight_decay: 0.06627424087925579
drop_path: 0.08878646004007172
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.496652126312256 seconds
Loss: 0.8517
Train Accuracy: 69.47%
Test Accuracy: 69.19%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

==== PBT Exploit & Explore ====
Top performers: [71.11]
Bottom performers: [69.19]
Member 4: lr changed from 0.0001726418806765435 to 0.0001215923844007238
Member 4: weight_decay changed from 0.06627424087925579 to 0.053336043203415104
Member 4: drop_path changed from 0.08878646004007172 to 0.11635503803712788
Member 4 copied from 2
LR=1.22e-04, WD=0.053, DropPath=0.116, Warmup=5 epochs, Batch=256

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

```
Time: 161.97s (Avg member: 32.39s)
Population Mean Accuracy: 69.98%
Best Member Accuracy: 71.11%
Mean Batch Size: 256
Mean Learning Rate: 3.77e-04
Mean Weight Decay: 0.082
```

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

```
--- Training Member 0 (Batch size: 256) ---
built data in 1.6809203624725342 seconds
LR changed during epoch: 4.03e-04 -> 3.93e-04
total runtime to train this model was 27.827122688293457 seconds
Hyperparameteres for model 0 at epoch 26
lr: 0.0005141528347830217
```

```
weight_decay: 0.1292318595217545
```

```
drop_path: 0.008490195628463093
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 3.317239761352539 seconds
```

```
Loss: 0.7814
Train Accuracy: 72.35%
Test Accuracy: 70.52%
```

```
Google Drive already mounted.
```

```
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt
```

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

```
built data in 1.5991156101226807 seconds
```

```
LR changed during epoch: 2.81e-04 -> 2.73e-04
total runtime to train this model was 27.352243661880493 seconds
Hyperparameteres for model 1 at epoch 26
```

```
lr: 0.0003577601982010012
```

```
weight_decay: 0.04172655668585622
```

```
drop_path: 0.16173938523674203
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.526947498321533 seconds
```

```
Loss: 0.8133
Train Accuracy: 71.35%
Test Accuracy: 70.05%
```

```
Google Drive already mounted.
```

```
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt
```

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

```
built data in 1.5666377544403076 seconds
```

LR changed during epoch: 6.22e-04 -> 6.06e-04
total runtime to train this model was 27.755349159240723 seconds
Hyperparameteres for model 2 at epoch 26
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.54270339012146 seconds

Loss: 0.7525
Train Accuracy: 73.29%
Test Accuracy: 69.51%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.7492449283599854 seconds
LR changed during epoch: 1.00e-04 -> 9.99e-05
total runtime to train this model was 27.16076636314392 seconds
Hyperparameteres for model 3 at epoch 26
lr: 0.00010000000000000009

weight_decay: 0.14874813601835002

drop_path: 0.12855657228163686

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.701385021209717 seconds

Loss: 0.7766
Train Accuracy: 72.55%
Test Accuracy: 71.62%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.5645475387573242 seconds
LR changed during epoch: 1.24e-07 -> 2.44e-05
total runtime to train this model was 27.895017862319946 seconds
Hyperparameteres for model 4 at epoch 26
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.458225965499878 seconds
Loss: 0.7241

Train Accuracy: 74.02%
Test Accuracy: 73.46%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

Time: 161.90s (Avg member: 32.38s)
Population Mean Accuracy: 71.03%
Best Member Accuracy: 73.46%
Mean Batch Size: 256
Mean Learning Rate: 3.77e-04
Mean Weight Decay: 0.082

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.6366991996765137 seconds
LR changed during epoch: 3.93e-04 -> 3.82e-04
total runtime to train this model was 28.358253479003906 seconds
Hyperparameteres for model 0 at epoch 27
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.519005298614502 seconds

Loss: 0.7707
Train Accuracy: 72.71%
Test Accuracy: 71.01%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6762092113494873 seconds
LR changed during epoch: 2.73e-04 -> 2.66e-04
total runtime to train this model was 27.613818407058716 seconds
Hyperparameteres for model 1 at epoch 27
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.451472520828247 seconds
Loss: 0.7962
Train Accuracy: 71.78%
Test Accuracy: 71.09%

Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6109225749969482 seconds
LR changed during epoch: 6.06e-04 -> 5.90e-04
total runtime to train this model was 27.58688449859619 seconds
Hyperparameteres for model 2 at epoch 27
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5275068283081055 seconds
Loss: 0.7346
Train Accuracy: 74.00%
Test Accuracy: 71.35%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5763311386108398 seconds
LR changed during epoch: 9.99e-05 -> 9.98e-05
total runtime to train this model was 27.44621968269348 seconds
Hyperparameteres for model 3 at epoch 27
lr: 0.00010000000000000009

weight_decay: 0.14874813601835002
drop_path: 0.12855657228163686
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.43891978263855 seconds
Loss: 0.7686
Train Accuracy: 72.71%
Test Accuracy: 71.71%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.7043609619140625 seconds
LR changed during epoch: 2.44e-05 -> 4.88e-05
total runtime to train this model was 26.9986412525177 seconds
Hyperparameteres for model 4 at epoch 27
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5405681133270264 seconds

Loss: 0.6825

Train Accuracy: 75.67%

Test Accuracy: 74.08%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 27 Summary:

=====

Time: 161.91s (Avg member: 32.38s)

Population Mean Accuracy: 71.85%

Best Member Accuracy: 74.08%

Mean Batch Size: 256

Mean Learning Rate: 3.77e-04

Mean Weight Decay: 0.082

=====

Epoch 28/70

=====

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

built data in 1.5712668895721436 seconds

LR changed during epoch: 3.82e-04 -> 3.71e-04

total runtime to train this model was 27.40262460708618 seconds

Hyperparameteres for model 0 at epoch 28

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.459475517272949 seconds

Loss: 0.7495

Train Accuracy: 73.37%

Test Accuracy: 71.79%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5941095352172852 seconds

LR changed during epoch: 2.66e-04 -> 2.58e-04

total runtime to train this model was 27.143125772476196 seconds

Hyperparameteres for model 1 at epoch 28

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4475080966949463 seconds
Loss: 0.7752
Train Accuracy: 72.44%
Test Accuracy: 71.27%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5879638195037842 seconds
LR changed during epoch: 5.90e-04 -> 5.73e-04
total runtime to train this model was 27.415241241455078 seconds
Hyperparameteres for model 2 at epoch 28
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.8314411640167236 seconds
Loss: 0.7102
Train Accuracy: 74.66%
Test Accuracy: 72.49%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5907559394836426 seconds
LR changed during epoch: 9.98e-05 -> 9.95e-05
total runtime to train this model was 27.1554114818573 seconds
Hyperparameteres for model 3 at epoch 28
lr: 0.00010000000000000009

weight_decay: 0.14874813601835002
drop_path: 0.12855657228163686
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.531247854232788 seconds
Loss: 0.7570
Train Accuracy: 73.31%
Test Accuracy: 71.46%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.560103178024292 seconds
LR changed during epoch: 4.88e-05 -> 7.31e-05
total runtime to train this model was 27.28726601600647 seconds
Hyperparameteres for model 4 at epoch 28
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6469130516052246 seconds

Loss: 0.6584

Train Accuracy: 76.65%

Test Accuracy: 74.27%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 28 Summary:

=====

Time: 159.46s (Avg member: 31.89s)

Population Mean Accuracy: 72.26%

Best Member Accuracy: 74.27%

Mean Batch Size: 256

Mean Learning Rate: 3.77e-04

Mean Weight Decay: 0.082

=====

Epoch 29/70

=====

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

built data in 1.6299357414245605 seconds

LR changed during epoch: 3.71e-04 -> 3.60e-04

total runtime to train this model was 27.70128035545349 seconds

Hyperparameteres for model 0 at epoch 29

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.614521026611328 seconds

Loss: 0.7299

Train Accuracy: 74.37%

Test Accuracy: 72.26%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6187529563903809 seconds

LR changed during epoch: 2.58e-04 -> 2.51e-04

total runtime to train this model was 27.461081504821777 seconds

Hyperparameteres for model 1 at epoch 29

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5330255031585693 seconds
Loss: 0.7606
Train Accuracy: 72.94%
Test Accuracy: 72.26%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6183624267578125 seconds
LR changed during epoch: 5.73e-04 -> 5.55e-04
total runtime to train this model was 27.599855661392212 seconds
Hyperparameteres for model 2 at epoch 29
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5645313262939453 seconds
Loss: 0.6887
Train Accuracy: 75.68%
Test Accuracy: 72.85%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.573077917098999 seconds
LR changed during epoch: 9.95e-05 -> 9.91e-05
total runtime to train this model was 27.102818727493286 seconds
Hyperparameteres for model 3 at epoch 29
lr: 0.00010000000000000009

weight_decay: 0.14874813601835002
drop_path: 0.12855657228163686

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.3635001182556152 seconds
Loss: 0.7484
Train Accuracy: 73.60%
Test Accuracy: 72.07%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.7060489654541016 seconds
LR changed during epoch: 7.31e-05 -> 9.74e-05

total runtime to train this model was 27.420828104019165 seconds

Hyperparameteres for model 4 at epoch 29

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.522653579711914 seconds

Loss: 0.6482

Train Accuracy: 77.13%

Test Accuracy: 74.77%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 29 Summary:

=====

Time: 161.35s (Avg member: 32.27s)

Population Mean Accuracy: 72.84%

Best Member Accuracy: 74.77%

Mean Batch Size: 256

Mean Learning Rate: 3.77e-04

Mean Weight Decay: 0.082

=====

Epoch 30/70

=====

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

built data in 1.5577147006988525 seconds

LR changed during epoch: 3.60e-04 -> 3.49e-04

total runtime to train this model was 27.15412712097168 seconds

Hyperparameteres for model 0 at epoch 30

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.447075605392456 seconds

Loss: 0.7129

Train Accuracy: 74.61%

Test Accuracy: 73.31%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5839924812316895 seconds

LR changed during epoch: 2.51e-04 -> 2.43e-04

total runtime to train this model was 26.72764277458191 seconds

Hyperparameteres for model 1 at epoch 30

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4704573154449463 seconds

Loss: 0.7439

Train Accuracy: 73.67%

Test Accuracy: 73.06%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.671858549118042 seconds

LR changed during epoch: 5.55e-04 -> 5.38e-04

total runtime to train this model was 27.231874704360962 seconds

Hyperparameteres for model 2 at epoch 30

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0375583171844482 seconds

Loss: 0.6711

Train Accuracy: 76.08%

Test Accuracy: 72.69%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.5915489196777344 seconds

LR changed during epoch: 9.91e-05 -> 9.86e-05

total runtime to train this model was 26.640817165374756 seconds

Hyperparameteres for model 3 at epoch 30

lr: 0.00010000000000000009

weight_decay: 0.14874813601835002

drop_path: 0.12855657228163686

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4006786346435547 seconds

Loss: 0.7356

Train Accuracy: 73.85%

Test Accuracy: 72.14%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.5866868495941162 seconds

LR changed during epoch: 9.74e-05 -> 1.22e-04

total runtime to train this model was 26.786033630371094 seconds

Hyperparameteres for model 4 at epoch 30

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4122238159179688 seconds

Loss: 0.6389

Train Accuracy: 77.17%

Test Accuracy: 74.85%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

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

Top performers: [74.85]

Bottom performers: [72.14]

Member 3: lr changed from 0.00010000000000000009 to 0.00010386772284068194

Member 3: weight_decay changed from 0.14874813601835002 to 0.15

Member 3: drop_path changed from 0.12855657228163686 to 0.1411670234699043

Member 3 copied from 4

LR=1.04e-04, WD=0.150, DropPath=0.141, Warmup=5 epochs, Batch=256

=====

Epoch 30 Summary:

=====

Time: 156.56s (Avg member: 31.31s)

Population Mean Accuracy: 73.21%

Best Member Accuracy: 74.85%

Mean Batch Size: 256

Mean Learning Rate: 3.78e-04

Mean Weight Decay: 0.082

=====

Epoch 31/70

=====

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

built data in 1.6149301528930664 seconds

LR changed during epoch: 3.49e-04 -> 3.37e-04

total runtime to train this model was 26.340413570404053 seconds

Hyperparameteres for model 0 at epoch 31

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1202402114868164 seconds
Loss: 0.6972
Train Accuracy: 75.40%
Test Accuracy: 73.27%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.711317777633667 seconds
LR changed during epoch: 2.43e-04 -> 2.34e-04
total runtime to train this model was 26.652305841445923 seconds
Hyperparameteres for model 1 at epoch 31
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.829970121383667 seconds
Loss: 0.7223
Train Accuracy: 74.23%
Test Accuracy: 73.14%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6218006610870361 seconds
LR changed during epoch: 5.38e-04 -> 5.19e-04
total runtime to train this model was 27.639382123947144 seconds
Hyperparameteres for model 2 at epoch 31
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4597060680389404 seconds
Loss: 0.6490
Train Accuracy: 76.83%
Test Accuracy: 73.73%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5736682415008545 seconds
LR changed during epoch: 1.06e-07 -> 2.09e-05
total runtime to train this model was 27.39547109603882 seconds
Hyperparameteres for model 3 at epoch 31

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.622384786605835 seconds

Loss: 0.6043

Train Accuracy: 78.54%

Test Accuracy: 75.17%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.797384262084961 seconds

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

total runtime to train this model was 26.66147804260254 seconds

Hyperparameteres for model 4 at epoch 31

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.2804596424102783 seconds

Loss: 0.6287

Train Accuracy: 77.63%

Test Accuracy: 74.48%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 31 Summary:

=====

Time: 158.62s (Avg member: 31.72s)

Population Mean Accuracy: 73.96%

Best Member Accuracy: 75.17%

Mean Batch Size: 256

Mean Learning Rate: 3.78e-04

Mean Weight Decay: 0.082

=====

Epoch 32/70

=====

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

built data in 1.5624747276306152 seconds

LR changed during epoch: 3.37e-04 -> 3.25e-04

total runtime to train this model was 27.443289518356323 seconds

Hyperparameteres for model 0 at epoch 32

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4771270751953125 seconds

Loss: 0.6768

Train Accuracy: 76.17%

Test Accuracy: 73.22%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5825164318084717 seconds

LR changed during epoch: 2.34e-04 -> 2.26e-04

total runtime to train this model was 26.51735258102417 seconds

Hyperparameteres for model 1 at epoch 32

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.473734140396118 seconds

Loss: 0.7114

Train Accuracy: 74.95%

Test Accuracy: 73.78%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5556857585906982 seconds

LR changed during epoch: 5.19e-04 -> 5.01e-04

total runtime to train this model was 26.719595193862915 seconds

Hyperparameteres for model 2 at epoch 32

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1934168338775635 seconds

Loss: 0.6335

Train Accuracy: 77.61%

Test Accuracy: 74.52%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7249839305877686 seconds
LR changed during epoch: 2.09e-05 -> 4.17e-05
total runtime to train this model was 26.330183029174805 seconds
Hyperparameteres for model 3 at epoch 32
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5365874767303467 seconds
Loss: 0.5996
Train Accuracy: 78.67%
Test Accuracy: 75.28%
Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5428376197814941 seconds
LR changed during epoch: 1.22e-04 -> 1.21e-04
total runtime to train this model was 26.64272451400757 seconds
Hyperparameteres for model 4 at epoch 32
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.416956901550293 seconds
Loss: 0.6115
Train Accuracy: 78.12%
Test Accuracy: 75.02%
Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====
Epoch 32 Summary:
=====
Time: 155.97s (Avg member: 31.19s)
Population Mean Accuracy: 74.36%
Best Member Accuracy: 75.28%
Mean Batch Size: 256
Mean Learning Rate: 3.78e-04
Mean Weight Decay: 0.082

=====
Epoch 33/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.632206678390503 seconds

LR changed during epoch: 3.25e-04 -> 3.13e-04
total runtime to train this model was 27.66791009902954 seconds
Hyperparameteres for model 0 at epoch 33
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5043623447418213 seconds

Loss: 0.6635
Train Accuracy: 76.41%
Test Accuracy: 73.83%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6667542457580566 seconds
LR changed during epoch: 2.26e-04 -> 2.18e-04
total runtime to train this model was 27.083014965057373 seconds
Hyperparameteres for model 1 at epoch 33
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.345417022705078 seconds

Loss: 0.6889
Train Accuracy: 75.55%
Test Accuracy: 74.29%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6174273490905762 seconds
LR changed during epoch: 5.01e-04 -> 4.83e-04
total runtime to train this model was 27.263458013534546 seconds
Hyperparameteres for model 2 at epoch 33
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.444546699523926 seconds
Loss: 0.6106

Train Accuracy: 78.32%
Test Accuracy: 74.41%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5763790607452393 seconds
LR changed during epoch: 4.17e-05 -> 6.24e-05
total runtime to train this model was 26.817658185958862 seconds
Hyperparameteres for model 3 at epoch 33
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.442363739013672 seconds
Loss: 0.5922
Train Accuracy: 78.80%
Test Accuracy: 75.29%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6493220329284668 seconds
LR changed during epoch: 1.21e-04 -> 1.21e-04
total runtime to train this model was 26.277915477752686 seconds
Hyperparameteres for model 4 at epoch 33
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5894975662231445 seconds
Loss: 0.6071
Train Accuracy: 78.40%
Test Accuracy: 75.12%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 33 Summary:

=====

Time: 158.91s (Avg member: 31.78s)
Population Mean Accuracy: 74.59%
Best Member Accuracy: 75.29%
Mean Batch Size: 256
Mean Learning Rate: 3.78e-04
Mean Weight Decay: 0.082

=====

Epoch 34/70

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

built data in 1.6345391273498535 seconds

LR changed during epoch: 3.13e-04 -> 3.01e-04

total runtime to train this model was 26.95924687385559 seconds

Hyperparameteres for model 0 at epoch 34

lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.594153642654419 seconds

Loss: 0.6442

Train Accuracy: 77.36%

Test Accuracy: 74.21%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6119635105133057 seconds

LR changed during epoch: 2.18e-04 -> 2.09e-04

total runtime to train this model was 27.233890056610107 seconds

Hyperparameteres for model 1 at epoch 34

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.539522647857666 seconds

Loss: 0.6804

Train Accuracy: 75.80%

Test Accuracy: 74.86%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5634238719940186 seconds

LR changed during epoch: 4.83e-04 -> 4.64e-04

total runtime to train this model was 26.82481551170349 seconds

Hyperparameteres for model 2 at epoch 34

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6266632080078125 seconds

Loss: 0.5917

Train Accuracy: 78.92%

Test Accuracy: 75.35%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.752640724182129 seconds

LR changed during epoch: 6.24e-05 -> 8.32e-05

total runtime to train this model was 26.52859401702881 seconds

Hyperparameteres for model 3 at epoch 34

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0977578163146973 seconds

Loss: 0.5899

Train Accuracy: 79.03%

Test Accuracy: 75.39%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.5589845180511475 seconds

LR changed during epoch: 1.21e-04 -> 1.20e-04

total runtime to train this model was 26.786892652511597 seconds

Hyperparameteres for model 4 at epoch 34

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.455299139022827 seconds

Loss: 0.5976

Train Accuracy: 78.68%

Test Accuracy: 75.57%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 34 Summary:

=====

Time: 157.04s (Avg member: 31.41s)

Population Mean Accuracy: 75.08%

Best Member Accuracy: 75.57%

Mean Batch Size: 256
Mean Learning Rate: 3.78e-04
Mean Weight Decay: 0.082

=====
Epoch 35/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5849292278289795 seconds
LR changed during epoch: 3.01e-04 -> 2.88e-04
total runtime to train this model was 26.534709692001343 seconds
Hyperparameteres for model 0 at epoch 35
lr: 0.0005141528347830217

weight_decay: 0.1292318595217545

drop_path: 0.008490195628463093

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3871841430664062 seconds
Loss: 0.6318
Train Accuracy: 77.59%
Test Accuracy: 74.36%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5848612785339355 seconds
LR changed during epoch: 2.09e-04 -> 2.01e-04
total runtime to train this model was 26.157551527023315 seconds
Hyperparameteres for model 1 at epoch 35
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.022416114807129 seconds
Loss: 0.6563
Train Accuracy: 76.76%
Test Accuracy: 74.47%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.771190881729126 seconds
LR changed during epoch: 4.64e-04 -> 4.45e-04
total runtime to train this model was 26.568776607513428 seconds
Hyperparameteres for model 2 at epoch 35
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7568166255950928 seconds
Loss: 0.5701
Train Accuracy: 79.55%
Test Accuracy: 75.44%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5567023754119873 seconds
LR changed during epoch: 8.32e-05 -> 1.04e-04
total runtime to train this model was 26.676576375961304 seconds
Hyperparameteres for model 3 at epoch 35
lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3882102966308594 seconds
Loss: 0.5919
Train Accuracy: 79.18%
Test Accuracy: 75.09%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5826952457427979 seconds
LR changed during epoch: 1.20e-04 -> 1.20e-04
total runtime to train this model was 26.37007164955139 seconds
Hyperparameteres for model 4 at epoch 35
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4607150554656982 seconds
Loss: 0.5949
Train Accuracy: 78.80%
Test Accuracy: 75.88%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

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

Top performers: [75.88]

Bottom performers: [74.36]

Member 0: lr changed from 0.0005141528347830217 to 0.0004409225223681892

Member 0: weight_decay changed from 0.1292318595217545 to 0.1466169240958866

Member 0: drop_path changed from 0.008490195628463093 to 0.03919332649600085

Member 0 copied from 4

LR=4.41e-04, WD=0.147, DropPath=0.039, Warmup=5 epochs, Batch=256

=====

Epoch 35 Summary:

=====

Time: 154.66s (Avg member: 30.93s)

Population Mean Accuracy: 75.05%

Best Member Accuracy: 75.88%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.085

=====

Epoch 36/70

=====

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

built data in 1.5704679489135742 seconds

LR changed during epoch: 4.50e-07 -> 8.86e-05

total runtime to train this model was 26.593388319015503 seconds

Hyperparameteres for model 0 at epoch 36

lr: 0.0004409225223681892

weight_decay: 0.1466169240958866

drop_path: 0.03919332649600085

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.6571431159973145 seconds

Loss: 0.5322

Train Accuracy: 81.19%

Test Accuracy: 76.00%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6760187149047852 seconds

LR changed during epoch: 2.01e-04 -> 1.92e-04

total runtime to train this model was 26.553507328033447 seconds

Hyperparameteres for model 1 at epoch 36

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.466630697250366 seconds

Loss: 0.6455

Train Accuracy: 77.24%

Test Accuracy: 75.23%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5845441818237305 seconds

LR changed during epoch: 4.45e-04 -> 4.26e-04

total runtime to train this model was 26.532308340072632 seconds

Hyperparameteres for model 2 at epoch 36

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4522788524627686 seconds

Loss: 0.5515

Train Accuracy: 80.45%

Test Accuracy: 75.97%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.5908880233764648 seconds

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

total runtime to train this model was 26.768895149230957 seconds

Hyperparameteres for model 3 at epoch 36

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4438860416412354 seconds

Loss: 0.5881

Train Accuracy: 79.08%

Test Accuracy: 75.91%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6619939804077148 seconds

LR changed during epoch: 1.20e-04 -> 1.19e-04

total runtime to train this model was 26.310819149017334 seconds

Hyperparameteres for model 4 at epoch 36

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5647687911987305 seconds

Loss: 0.5782

Train Accuracy: 79.30%

Test Accuracy: 75.65%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 36 Summary:

=====

Time: 156.70s (Avg member: 31.34s)

Population Mean Accuracy: 75.75%

Best Member Accuracy: 76.00%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.085

=====

Epoch 37/70

=====

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

built data in 1.601313829421997 seconds

LR changed during epoch: 8.86e-05 -> 1.77e-04

total runtime to train this model was 26.772473573684692 seconds

Hyperparameteres for model 0 at epoch 37

lr: 0.0004409225223681892

weight_decay: 0.1466169240958866

drop_path: 0.03919332649600085

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4682016372680664 seconds

Loss: 0.5397

Train Accuracy: 80.93%

Test Accuracy: 75.71%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.552738904953003 seconds

LR changed during epoch: 1.92e-04 -> 1.84e-04

total runtime to train this model was 26.94058060646057 seconds

Hyperparameteres for model 1 at epoch 37

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3500683307647705 seconds
Loss: 0.6280
Train Accuracy: 77.78%
Test Accuracy: 75.26%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7141895294189453 seconds
LR changed during epoch: 4.26e-04 -> 4.07e-04
total runtime to train this model was 26.446481227874756 seconds
Hyperparameteres for model 2 at epoch 37
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.508671522140503 seconds
Loss: 0.5280
Train Accuracy: 81.06%
Test Accuracy: 75.53%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6955053806304932 seconds
LR changed during epoch: 1.04e-04 -> 1.04e-04
total runtime to train this model was 26.29365563392639 seconds
Hyperparameteres for model 3 at epoch 37
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.337228298187256 seconds
Loss: 0.5802
Train Accuracy: 79.41%
Test Accuracy: 75.40%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.609116792678833 seconds
LR changed during epoch: 1.19e-04 -> 1.18e-04

total runtime to train this model was 26.087060928344727 seconds

Hyperparameteres for model 4 at epoch 37

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.36594820022583 seconds

Loss: 0.5738

Train Accuracy: 79.65%

Test Accuracy: 75.94%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 37 Summary:

=====

Time: 154.97s (Avg member: 30.99s)

Population Mean Accuracy: 75.57%

Best Member Accuracy: 75.94%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.085

=====

Epoch 38/70

=====

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

built data in 1.5582425594329834 seconds

LR changed during epoch: 1.77e-04 -> 2.65e-04

total runtime to train this model was 26.70959997177124 seconds

Hyperparameteres for model 0 at epoch 38

lr: 0.0004409225223681892

weight_decay: 0.1466169240958866

drop_path: 0.03919332649600085

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.419497013092041 seconds

Loss: 0.5572

Train Accuracy: 80.23%

Test Accuracy: 74.79%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6325657367706299 seconds

LR changed during epoch: 1.84e-04 -> 1.75e-04

total runtime to train this model was 26.367827653884888 seconds

Hyperparameteres for model 1 at epoch 38

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3950555324554443 seconds

Loss: 0.6132

Train Accuracy: 78.25%

Test Accuracy: 75.87%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.736372947692871 seconds

LR changed during epoch: 4.07e-04 -> 3.87e-04

total runtime to train this model was 26.571930646896362 seconds

Hyperparameteres for model 2 at epoch 38

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.425679922103882 seconds

Loss: 0.5158

Train Accuracy: 81.79%

Test Accuracy: 75.62%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6876087188720703 seconds

LR changed during epoch: 1.04e-04 -> 1.03e-04

total runtime to train this model was 26.96988296508789 seconds

Hyperparameteres for model 3 at epoch 38

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.495248556137085 seconds

Loss: 0.5729

Train Accuracy: 79.61%

Test Accuracy: 75.67%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.5919382572174072 seconds

LR changed during epoch: 1.18e-04 -> 1.17e-04

total runtime to train this model was 27.845341682434082 seconds

Hyperparameteres for model 4 at epoch 38

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5222043991088867 seconds

Loss: 0.5698

Train Accuracy: 79.64%

Test Accuracy: 76.09%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 38 Summary:

=====

Time: 157.15s (Avg member: 31.43s)

Population Mean Accuracy: 75.61%

Best Member Accuracy: 76.09%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.085

=====

Epoch 39/70

=====

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

built data in 1.7841029167175293 seconds

LR changed during epoch: 2.65e-04 -> 3.53e-04

total runtime to train this model was 26.881670236587524 seconds

Hyperparameteres for model 0 at epoch 39

lr: 0.0004409225223681892

weight_decay: 0.1466169240958866

drop_path: 0.03919332649600085

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.5016205310821533 seconds

Loss: 0.5838

Train Accuracy: 79.25%

Test Accuracy: 74.62%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6321065425872803 seconds
LR changed during epoch: 1.75e-04 -> 1.66e-04
total runtime to train this model was 28.453763484954834 seconds
Hyperparameteres for model 1 at epoch 39
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.578192949295044 seconds
Loss: 0.6009
Train Accuracy: 78.65%
Test Accuracy: 76.07%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6960930824279785 seconds
LR changed during epoch: 3.87e-04 -> 3.68e-04
total runtime to train this model was 27.377719163894653 seconds
Hyperparameteres for model 2 at epoch 39
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6401915550231934 seconds
Loss: 0.4835
Train Accuracy: 82.87%
Test Accuracy: 76.35%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6140079498291016 seconds
LR changed during epoch: 1.03e-04 -> 1.03e-04
total runtime to train this model was 27.78659725189209 seconds
Hyperparameteres for model 3 at epoch 39
lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.9135494232177734 seconds

Loss: 0.5626

Train Accuracy: 80.14%

Test Accuracy: 76.01%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.710733413696289 seconds

LR changed during epoch: 1.17e-04 -> 1.16e-04

total runtime to train this model was 27.497253894805908 seconds

Hyperparameteres for model 4 at epoch 39

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4878549575805664 seconds

Loss: 0.5586

Train Accuracy: 79.98%

Test Accuracy: 76.09%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 39 Summary:

=====

Time: 162.89s (Avg member: 32.58s)

Population Mean Accuracy: 75.83%

Best Member Accuracy: 76.35%

Mean Batch Size: 256

Mean Learning Rate: 3.63e-04

Mean Weight Decay: 0.085

=====

Epoch 40/70

=====

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

built data in 1.6419384479522705 seconds

LR changed during epoch: 3.53e-04 -> 4.41e-04

total runtime to train this model was 26.95752739906311 seconds

Hyperparameteres for model 0 at epoch 40

lr: 0.0004409225223681892

weight_decay: 0.1466169240958866

drop_path: 0.03919332649600085

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5817058086395264 seconds

Loss: 0.6013

Train Accuracy: 78.74%
Test Accuracy: 74.92%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6500699520111084 seconds
LR changed during epoch: 1.66e-04 -> 1.58e-04
total runtime to train this model was 27.610576152801514 seconds
Hyperparameteres for model 1 at epoch 40
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.858994960784912 seconds
Loss: 0.5846
Train Accuracy: 79.24%
Test Accuracy: 76.40%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.575164556503296 seconds
LR changed during epoch: 3.68e-04 -> 3.49e-04
total runtime to train this model was 27.817925930023193 seconds
Hyperparameteres for model 2 at epoch 40
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5564281940460205 seconds
Loss: 0.4682
Train Accuracy: 83.27%
Test Accuracy: 76.36%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.679870843887329 seconds
LR changed during epoch: 1.03e-04 -> 1.02e-04
total runtime to train this model was 27.38463521003723 seconds
Hyperparameteres for model 3 at epoch 40
lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.51529860496521 seconds
Loss: 0.5591
Train Accuracy: 80.28%
Test Accuracy: 75.90%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6144564151763916 seconds
LR changed during epoch: 1.16e-04 -> 1.15e-04
total runtime to train this model was 27.150978803634644 seconds
Hyperparameteres for model 4 at epoch 40
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.119755983352661 seconds
Loss: 0.5487
Train Accuracy: 80.45%
Test Accuracy: 76.79%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

==== PBT Exploit & Explore ====
Top performers: [76.79]
Bottom performers: [74.92]
Member 0: lr changed from 0.0004409225223681892 to 0.0005901368589956796
Member 0: weight_decay changed from 0.1466169240958866 to 0.14542664091166313
Member 0: drop_path changed from 0.03919332649600085 to 0.02517903097972727
Member 0 copied from 4
LR=5.90e-04, WD=0.145, DropPath=0.025, Warmup=5 epochs, Batch=256

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

Time: 161.01s (Avg member: 32.20s)
Population Mean Accuracy: 76.07%
Best Member Accuracy: 76.79%
Mean Batch Size: 256
Mean Learning Rate: 3.93e-04
Mean Weight Decay: 0.085

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.9211533069610596 seconds

LR changed during epoch: 6.02e-07 -> 1.19e-04
total runtime to train this model was 26.872639656066895 seconds
Hyperparameteres for model 0 at epoch 41
lr: 0.0005901368589956796

weight_decay: 0.14542664091166313
drop_path: 0.02517903097972727
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6468803882598877 seconds
Loss: 0.4922
Train Accuracy: 82.53%
Test Accuracy: 76.54%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6317791938781738 seconds
LR changed during epoch: 1.58e-04 -> 1.49e-04
total runtime to train this model was 27.38303852081299 seconds
Hyperparameteres for model 1 at epoch 41
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622
drop_path: 0.16173938523674203
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5561883449554443 seconds
Loss: 0.5723
Train Accuracy: 79.72%
Test Accuracy: 76.73%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6197631359100342 seconds
LR changed during epoch: 3.49e-04 -> 3.30e-04
total runtime to train this model was 27.53709125518799 seconds
Hyperparameteres for model 2 at epoch 41
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8177216053009033 seconds
Loss: 0.4468

Train Accuracy: 84.12%
Test Accuracy: 76.06%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.934831142425537 seconds
LR changed during epoch: 1.02e-04 -> 1.02e-04
total runtime to train this model was 27.453600883483887 seconds
Hyperparameteres for model 3 at epoch 41
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6762852668762207 seconds
Loss: 0.5516
Train Accuracy: 80.40%
Test Accuracy: 76.51%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6509277820587158 seconds
LR changed during epoch: 1.15e-04 -> 1.13e-04
total runtime to train this model was 27.646525382995605 seconds
Hyperparameteres for model 4 at epoch 41
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.477112293243408 seconds
Loss: 0.5419
Train Accuracy: 80.63%
Test Accuracy: 76.28%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 41 Summary:

=====

Time: 160.13s (Avg member: 32.03s)
Population Mean Accuracy: 76.42%
Best Member Accuracy: 76.73%
Mean Batch Size: 256
Mean Learning Rate: 3.93e-04
Mean Weight Decay: 0.085

=====

Epoch 42/70

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

built data in 1.630012035369873 seconds

LR changed during epoch: 1.19e-04 -> 2.37e-04

total runtime to train this model was 27.361602306365967 seconds

Hyperparameteres for model 0 at epoch 42

lr: 0.0005901368589956796

weight_decay: 0.14542664091166313

drop_path: 0.02517903097972727

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.502289056777954 seconds

Loss: 0.5130

Train Accuracy: 81.63%

Test Accuracy: 75.63%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.8470466136932373 seconds

LR changed during epoch: 1.49e-04 -> 1.41e-04

total runtime to train this model was 27.847860097885132 seconds

Hyperparameteres for model 1 at epoch 42

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.964585542678833 seconds

Loss: 0.5529

Train Accuracy: 80.27%

Test Accuracy: 76.98%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6294832229614258 seconds

LR changed during epoch: 3.30e-04 -> 3.12e-04

total runtime to train this model was 27.38750982284546 seconds

Hyperparameteres for model 2 at epoch 42

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5356969833374023 seconds

Loss: 0.4267

Train Accuracy: 84.79%

Test Accuracy: 76.66%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6737632751464844 seconds

LR changed during epoch: 1.02e-04 -> 1.01e-04

total runtime to train this model was 27.459609270095825 seconds

Hyperparameteres for model 3 at epoch 42

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6031479835510254 seconds

Loss: 0.5435

Train Accuracy: 80.60%

Test Accuracy: 76.65%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.8148274421691895 seconds

LR changed during epoch: 1.13e-04 -> 1.12e-04

total runtime to train this model was 27.43511152267456 seconds

Hyperparameteres for model 4 at epoch 42

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0900659561157227 seconds

Loss: 0.5342

Train Accuracy: 81.03%

Test Accuracy: 75.97%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 42 Summary:

=====

Time: 161.10s (Avg member: 32.22s)

Population Mean Accuracy: 76.38%

Best Member Accuracy: 76.98%

Mean Batch Size: 256
Mean Learning Rate: 3.93e-04
Mean Weight Decay: 0.085

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.6435112953186035 seconds
LR changed during epoch: 2.37e-04 -> 3.55e-04
total runtime to train this model was 27.614600896835327 seconds
Hyperparameteres for model 0 at epoch 43
lr: 0.0005901368589956796

weight_decay: 0.14542664091166313

drop_path: 0.02517903097972727

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4837534427642822 seconds
Loss: 0.5405
Train Accuracy: 80.69%
Test Accuracy: 75.09%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5872395038604736 seconds
LR changed during epoch: 1.41e-04 -> 1.32e-04
total runtime to train this model was 27.439794301986694 seconds
Hyperparameteres for model 1 at epoch 43
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4193458557128906 seconds
Loss: 0.5383
Train Accuracy: 80.89%
Test Accuracy: 76.77%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7844493389129639 seconds
LR changed during epoch: 3.12e-04 -> 2.93e-04
total runtime to train this model was 27.84190344810486 seconds
Hyperparameteres for model 2 at epoch 43
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.962881088256836 seconds

Loss: 0.4099

Train Accuracy: 85.47%

Test Accuracy: 76.80%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.633413553237915 seconds

LR changed during epoch: 1.01e-04 -> 1.00e-04

total runtime to train this model was 27.76306676864624 seconds

Hyperparameteres for model 3 at epoch 43

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.516632080078125 seconds

Loss: 0.5344

Train Accuracy: 80.94%

Test Accuracy: 76.58%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6485974788665771 seconds

LR changed during epoch: 1.12e-04 -> 1.10e-04

total runtime to train this model was 27.403800010681152 seconds

Hyperparameteres for model 4 at epoch 43

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.514993190765381 seconds

Loss: 0.5273

Train Accuracy: 81.23%

Test Accuracy: 76.64%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 43 Summary:

```
=====
```

Time: 160.59s (Avg member: 32.12s)

Population Mean Accuracy: 76.38%

Best Member Accuracy: 76.80%

Mean Batch Size: 256

Mean Learning Rate: 3.93e-04

Mean Weight Decay: 0.085

```
=====
```

Epoch 44/70

```
=====
```

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

built data in 1.78928542137146 seconds

LR changed during epoch: 3.55e-04 -> 4.73e-04

total runtime to train this model was 27.57512640953064 seconds

Hyperparameteres for model 0 at epoch 44

lr: 0.0005901368589956796

weight_decay: 0.14542664091166313

drop_path: 0.02517903097972727

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.32076096534729 seconds

Loss: 0.5804

Train Accuracy: 79.31%

Test Accuracy: 74.17%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6222915649414062 seconds

LR changed during epoch: 1.32e-04 -> 1.24e-04

total runtime to train this model was 27.58227801322937 seconds

Hyperparameteres for model 1 at epoch 44

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.556082010269165 seconds

Loss: 0.5332

Train Accuracy: 81.11%

Test Accuracy: 77.74%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6624352931976318 seconds

LR changed during epoch: 2.93e-04 -> 2.75e-04

total runtime to train this model was 27.672603130340576 seconds

Hyperparameteres for model 2 at epoch 44

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.649982213973999 seconds

Loss: 0.3900

Train Accuracy: 85.96%

Test Accuracy: 76.99%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.8677515983581543 seconds

LR changed during epoch: 1.00e-04 -> 9.91e-05

total runtime to train this model was 27.883710861206055 seconds

Hyperparameteres for model 3 at epoch 44

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.059941291809082 seconds

Loss: 0.5314

Train Accuracy: 81.15%

Test Accuracy: 76.98%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.60483980178833 seconds

LR changed during epoch: 1.10e-04 -> 1.08e-04

total runtime to train this model was 27.90467143058777 seconds

Hyperparameteres for model 4 at epoch 44

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5285515785217285 seconds

Loss: 0.5253

Train Accuracy: 81.45%

Test Accuracy: 76.95%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 44 Summary:

=====

Time: 162.62s (Avg member: 32.52s)
Population Mean Accuracy: 76.57%
Best Member Accuracy: 77.74%
Mean Batch Size: 256
Mean Learning Rate: 3.93e-04
Mean Weight Decay: 0.085

=====

Epoch 45/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6579456329345703 seconds
LR changed during epoch: 4.73e-04 -> 5.90e-04
total runtime to train this model was 27.71062397956848 seconds
Hyperparameteres for model 0 at epoch 45
lr: 0.0005901368589956796

weight_decay: 0.14542664091166313

drop_path: 0.02517903097972727

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.75545072555542 seconds
Loss: 0.6186
Train Accuracy: 77.83%
Test Accuracy: 73.98%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.84266996383667 seconds
LR changed during epoch: 1.24e-04 -> 1.16e-04
total runtime to train this model was 28.307634592056274 seconds
Hyperparameteres for model 1 at epoch 45
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4752895832061768 seconds
Loss: 0.5166
Train Accuracy: 81.60%
Test Accuracy: 77.24%
Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.615194320678711 seconds

LR changed during epoch: 2.75e-04 -> 2.57e-04

total runtime to train this model was 27.760194063186646 seconds

Hyperparameteres for model 2 at epoch 45

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.498431921005249 seconds

Loss: 0.3675

Train Accuracy: 86.78%

Test Accuracy: 77.38%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6585443019866943 seconds

LR changed during epoch: 9.91e-05 -> 9.80e-05

total runtime to train this model was 27.55763578414917 seconds

Hyperparameteres for model 3 at epoch 45

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.979179620742798 seconds

Loss: 0.5159

Train Accuracy: 81.60%

Test Accuracy: 76.79%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.862492561340332 seconds

LR changed during epoch: 1.08e-04 -> 1.06e-04

total runtime to train this model was 27.5661039352417 seconds

Hyperparameteres for model 4 at epoch 45

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5170626640319824 seconds

Loss: 0.5123

Train Accuracy: 81.80%

Test Accuracy: 76.91%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

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

Top performers: [77.38]

Bottom performers: [73.98]

Member 0: lr changed from 0.0005901368589956796 to 0.00042666661429188236

Member 0: weight_decay changed from 0.14542664091166313 to 0.15

Member 0: drop_path changed from 0.02517903097972727 to 0.0

Member 0 copied from 2

LR=4.27e-04, WD=0.150, DropPath=0.000, Warmup=5 epochs, Batch=256

=====

Epoch 45 Summary:

=====

Time: 162.10s (Avg member: 32.42s)

Population Mean Accuracy: 76.46%

Best Member Accuracy: 77.38%

Mean Batch Size: 256

Mean Learning Rate: 3.61e-04

Mean Weight Decay: 0.086

=====

Epoch 46/70

=====

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

built data in 1.6659245491027832 seconds

LR changed during epoch: 4.35e-07 -> 8.58e-05

total runtime to train this model was 27.608555555343628 seconds

Hyperparameteres for model 0 at epoch 46

lr: 0.00042666661429188236

weight_decay: 0.15

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5705859661102295 seconds

Loss: 0.2917

Train Accuracy: 89.80%

Test Accuracy: 77.53%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6169407367706299 seconds

LR changed during epoch: 1.16e-04 -> 1.08e-04

total runtime to train this model was 27.279082536697388 seconds

Hyperparameteres for model 1 at epoch 46

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7427568435668945 seconds

Loss: 0.4948

Train Accuracy: 82.38%

Test Accuracy: 77.62%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.8667571544647217 seconds

LR changed during epoch: 2.57e-04 -> 2.39e-04

total runtime to train this model was 27.590510368347168 seconds

Hyperparameteres for model 2 at epoch 46

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.994171380996704 seconds

Loss: 0.3494

Train Accuracy: 87.43%

Test Accuracy: 77.20%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6295359134674072 seconds

LR changed during epoch: 9.80e-05 -> 9.68e-05

total runtime to train this model was 28.078115940093994 seconds

Hyperparameteres for model 3 at epoch 46

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7192184925079346 seconds

Loss: 0.5084

Train Accuracy: 81.82%

Test Accuracy: 76.93%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.724402904510498 seconds

LR changed during epoch: 1.06e-04 -> 1.04e-04

total runtime to train this model was 28.381000995635986 seconds

Hyperparameteres for model 4 at epoch 46

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.224451780319214 seconds

Loss: 0.5078

Train Accuracy: 81.95%

Test Accuracy: 76.49%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 46 Summary:

=====

Time: 163.04s (Avg member: 32.61s)

Population Mean Accuracy: 77.15%

Best Member Accuracy: 77.62%

Mean Batch Size: 256

Mean Learning Rate: 3.61e-04

Mean Weight Decay: 0.086

=====

Epoch 47/70

=====

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

built data in 1.8648059368133545 seconds

LR changed during epoch: 8.58e-05 -> 1.71e-04

total runtime to train this model was 28.21984314918518 seconds

Hyperparameteres for model 0 at epoch 47

lr: 0.00042666661429188236

weight_decay: 0.15

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5878231525421143 seconds

Loss: 0.2825

Train Accuracy: 89.96%

Test Accuracy: 77.43%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

```
--- Training Member 1 (Batch size: 256) ---
built data in 1.6604304313659668 seconds
LR changed during epoch: 1.08e-04 -> 1.00e-04
total runtime to train this model was 27.723166704177856 seconds
Hyperparameteres for model 1 at epoch 47
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622
drop_path: 0.16173938523674203
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5590627193450928 seconds
Loss: 0.4903
Train Accuracy: 82.56%
Test Accuracy: 77.58%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6311829090118408 seconds
LR changed during epoch: 2.39e-04 -> 2.21e-04
total runtime to train this model was 27.84107995033264 seconds
Hyperparameteres for model 2 at epoch 47
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.481334924697876 seconds
Loss: 0.3312
Train Accuracy: 88.13%
Test Accuracy: 77.12%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7325007915496826 seconds
LR changed during epoch: 9.68e-05 -> 9.54e-05
total runtime to train this model was 27.728951930999756 seconds
Hyperparameteres for model 3 at epoch 47
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
```

evaluation in 2.5970234870910645 seconds

Loss: 0.5038

Train Accuracy: 82.10%

Test Accuracy: 76.61%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6837806701660156 seconds

LR changed during epoch: 1.04e-04 -> 1.02e-04

total runtime to train this model was 28.27225661277771 seconds

Hyperparameteres for model 4 at epoch 47

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5095205307006836 seconds

Loss: 0.5025

Train Accuracy: 82.17%

Test Accuracy: 77.15%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 47 Summary:

=====

Time: 163.36s (Avg member: 32.67s)

Population Mean Accuracy: 77.18%

Best Member Accuracy: 77.58%

Mean Batch Size: 256

Mean Learning Rate: 3.61e-04

Mean Weight Decay: 0.086

=====

Epoch 48/70

=====

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

built data in 1.6331517696380615 seconds

LR changed during epoch: 1.71e-04 -> 2.56e-04

total runtime to train this model was 27.64226222038269 seconds

Hyperparameteres for model 0 at epoch 48

lr: 0.00042666661429188236

weight_decay: 0.15

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.6046769618988037 seconds

Loss: 0.2955

Train Accuracy: 89.48%
Test Accuracy: 76.62%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7319097518920898 seconds
LR changed during epoch: 1.00e-04 -> 9.27e-05
total runtime to train this model was 28.068808794021606 seconds
Hyperparameteres for model 1 at epoch 48
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.526311159133911 seconds
Loss: 0.4781
Train Accuracy: 83.14%
Test Accuracy: 77.85%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6093733310699463 seconds
LR changed during epoch: 2.21e-04 -> 2.05e-04
total runtime to train this model was 27.983877897262573 seconds
Hyperparameteres for model 2 at epoch 48
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5523416996002197 seconds
Loss: 0.3082
Train Accuracy: 89.23%
Test Accuracy: 76.81%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7018969058990479 seconds
LR changed during epoch: 9.54e-05 -> 9.40e-05
total runtime to train this model was 27.607521772384644 seconds
Hyperparameteres for model 3 at epoch 48
lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.752817392349243 seconds

Loss: 0.5003

Train Accuracy: 82.17%

Test Accuracy: 76.40%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6198995113372803 seconds

LR changed during epoch: 1.02e-04 -> 1.00e-04

total runtime to train this model was 27.663602352142334 seconds

Hyperparameteres for model 4 at epoch 48

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.572031021118164 seconds

Loss: 0.4862

Train Accuracy: 82.62%

Test Accuracy: 77.03%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 48 Summary:

=====

Time: 163.63s (Avg member: 32.73s)

Population Mean Accuracy: 76.94%

Best Member Accuracy: 77.85%

Mean Batch Size: 256

Mean Learning Rate: 3.61e-04

Mean Weight Decay: 0.086

=====

Epoch 49/70

=====

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

built data in 1.6886498928070068 seconds

LR changed during epoch: 2.56e-04 -> 3.42e-04

total runtime to train this model was 27.23012137413025 seconds

Hyperparameteres for model 0 at epoch 49

lr: 0.00042666661429188236

weight_decay: 0.15

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6089744567871094 seconds
Loss: 0.3282
Train Accuracy: 88.21%
Test Accuracy: 77.00%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.60988450050354 seconds
LR changed during epoch: 9.27e-05 -> 8.52e-05
total runtime to train this model was 27.443240642547607 seconds
Hyperparameteres for model 1 at epoch 49
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.5745158195495605 seconds
Loss: 0.4580
Train Accuracy: 83.49%
Test Accuracy: 77.91%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7075128555297852 seconds
LR changed during epoch: 2.05e-04 -> 1.88e-04
total runtime to train this model was 27.564841508865356 seconds
Hyperparameteres for model 2 at epoch 49
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5253520011901855 seconds
Loss: 0.2932
Train Accuracy: 89.59%
Test Accuracy: 77.21%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.610755443572998 seconds
LR changed during epoch: 9.40e-05 -> 9.25e-05
total runtime to train this model was 27.92193841934204 seconds
Hyperparameteres for model 3 at epoch 49
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5508384704589844 seconds
Loss: 0.4889
Train Accuracy: 82.70%
Test Accuracy: 76.71%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.680823564529419 seconds
LR changed during epoch: 1.00e-04 -> 9.79e-05
total runtime to train this model was 27.73349142074585 seconds
Hyperparameteres for model 4 at epoch 49
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6600351333618164 seconds
Loss: 0.4898
Train Accuracy: 82.65%
Test Accuracy: 76.99%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====
Epoch 49 Summary:
=====

Time: 162.51s (Avg member: 32.50s)
Population Mean Accuracy: 77.16%
Best Member Accuracy: 77.91%
Mean Batch Size: 256
Mean Learning Rate: 3.61e-04
Mean Weight Decay: 0.086

=====
Epoch 50/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.628000020980835 seconds
LR changed during epoch: 3.42e-04 -> 4.27e-04
total runtime to train this model was 28.016608476638794 seconds
Hyperparameteres for model 0 at epoch 50
lr: 0.00042666661429188236

weight_decay: 0.15

drop_path: 0.0
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.556107997894287 seconds
Loss: 0.3538
Train Accuracy: 87.25%
Test Accuracy: 76.36%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.682715654373169 seconds
LR changed during epoch: 8.52e-05 -> 7.80e-05
total runtime to train this model was 27.41568660736084 seconds
Hyperparameteres for model 1 at epoch 50
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622
drop_path: 0.16173938523674203
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.56245493888855 seconds
Loss: 0.4582
Train Accuracy: 83.57%
Test Accuracy: 78.07%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6878838539123535 seconds
LR changed during epoch: 1.88e-04 -> 1.72e-04
total runtime to train this model was 27.0308358669281 seconds
Hyperparameteres for model 2 at epoch 50
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.620292901992798 seconds
Loss: 0.2803
Train Accuracy: 89.92%
Test Accuracy: 77.61%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6927759647369385 seconds
LR changed during epoch: 9.25e-05 -> 9.09e-05
total runtime to train this model was 27.26640033721924 seconds
Hyperparameteres for model 3 at epoch 50
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.495110511779785 seconds

Loss: 0.4841
Train Accuracy: 82.81%
Test Accuracy: 76.92%
Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6478722095489502 seconds
LR changed during epoch: 9.79e-05 -> 9.55e-05
total runtime to train this model was 27.43479037284851 seconds
Hyperparameteres for model 4 at epoch 50
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4428749084472656 seconds
Loss: 0.4759
Train Accuracy: 82.93%
Test Accuracy: 77.37%
Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

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

==== PBT Exploit & Explore ====
Top performers: [78.07]
Bottom performers: [76.36]
Member 0: lr changed from 0.00042666661429188236 to 0.0006420527406879986
Member 0 copied from 1
LR=6.42e-04, WD=0.150, DropPath=0.000, Warmup=5 epochs, Batch=256

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

Time: 160.45s (Avg member: 32.09s)
Population Mean Accuracy: 77.27%
Best Member Accuracy: 78.07%
Mean Batch Size: 256
Mean Learning Rate: 4.04e-04

Mean Weight Decay: 0.086

=====

Epoch 51/70

=====

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

built data in 1.6897742748260498 seconds

LR changed during epoch: 6.55e-07 -> 1.29e-04

total runtime to train this model was 27.207337141036987 seconds

Hyperparameteres for model 0 at epoch 51

lr: 0.0006420527406879986

weight_decay: 0.15

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.078401803970337 seconds

Loss: 0.3873

Train Accuracy: 86.14%

Test Accuracy: 77.65%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.737760066986084 seconds

LR changed during epoch: 7.80e-05 -> 7.10e-05

total runtime to train this model was 27.828455686569214 seconds

Hyperparameteres for model 1 at epoch 51

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.521186351776123 seconds

Loss: 0.4348

Train Accuracy: 84.45%

Test Accuracy: 78.42%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6716206073760986 seconds

LR changed during epoch: 1.72e-04 -> 1.57e-04

total runtime to train this model was 27.567404747009277 seconds

Hyperparameteres for model 2 at epoch 51

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5665037631988525 seconds

Loss: 0.2629

Train Accuracy: 90.68%

Test Accuracy: 77.45%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6073684692382812 seconds

LR changed during epoch: 9.09e-05 -> 8.92e-05

total runtime to train this model was 27.8087956905365 seconds

Hyperparameteres for model 3 at epoch 51

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.970113754272461 seconds

Loss: 0.4831

Train Accuracy: 82.94%

Test Accuracy: 76.67%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.8540990352630615 seconds

LR changed during epoch: 9.55e-05 -> 9.31e-05

total runtime to train this model was 27.473544120788574 seconds

Hyperparameteres for model 4 at epoch 51

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5182013511657715 seconds

Loss: 0.4696

Train Accuracy: 83.29%

Test Accuracy: 77.05%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 51 Summary:

=====

Time: 161.41s (Avg member: 32.28s)
Population Mean Accuracy: 77.45%
Best Member Accuracy: 78.42%
Mean Batch Size: 256
Mean Learning Rate: 4.04e-04
Mean Weight Decay: 0.086

=====
Epoch 52/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6277797222137451 seconds
LR changed during epoch: 1.29e-04 -> 2.57e-04
total runtime to train this model was 27.49719524383545 seconds
Hyperparameteres for model 0 at epoch 52
lr: 0.0006420527406879986

weight_decay: 0.15

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.473618745803833 seconds

Loss: 0.4575
Train Accuracy: 83.60%
Test Accuracy: 76.21%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6773040294647217 seconds
LR changed during epoch: 7.10e-05 -> 6.43e-05
total runtime to train this model was 27.57353138923645 seconds
Hyperparameteres for model 1 at epoch 52
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0556771755218506 seconds

Loss: 0.4301
Train Accuracy: 84.62%
Test Accuracy: 78.41%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7790780067443848 seconds
LR changed during epoch: 1.57e-04 -> 1.42e-04
total runtime to train this model was 27.400384187698364 seconds
Hyperparameteres for model 2 at epoch 52

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.6628077030181885 seconds

Loss: 0.2446

Train Accuracy: 91.34%

Test Accuracy: 77.55%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6670286655426025 seconds

LR changed during epoch: 8.92e-05 -> 8.75e-05

total runtime to train this model was 27.683597326278687 seconds

Hyperparameteres for model 3 at epoch 52

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.543250560760498 seconds

Loss: 0.4771

Train Accuracy: 82.91%

Test Accuracy: 76.79%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.584256649017334 seconds

LR changed during epoch: 9.31e-05 -> 9.06e-05

total runtime to train this model was 27.28982138633728 seconds

Hyperparameteres for model 4 at epoch 52

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5081708431243896 seconds

Loss: 0.4638

Train Accuracy: 83.52%

Test Accuracy: 77.54%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====
Epoch 52 Summary:
=====

Time: 160.37s (Avg member: 32.07s)

Population Mean Accuracy: 77.30%

Best Member Accuracy: 78.41%

Mean Batch Size: 256

Mean Learning Rate: 4.04e-04

Mean Weight Decay: 0.086

=====
Epoch 53/70
=====

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

built data in 1.798034906387329 seconds

LR changed during epoch: 2.57e-04 -> 3.86e-04

total runtime to train this model was 27.10290288925171 seconds

Hyperparameteres for model 0 at epoch 53

lr: 0.0006420527406879986

weight_decay: 0.15

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.3676726818084717 seconds

Loss: 0.5334

Train Accuracy: 80.72%

Test Accuracy: 75.33%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.5843262672424316 seconds

LR changed during epoch: 6.43e-05 -> 5.79e-05

total runtime to train this model was 27.47768259048462 seconds

Hyperparameteres for model 1 at epoch 53

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5181474685668945 seconds

Loss: 0.4140

Train Accuracy: 85.26%

Test Accuracy: 78.48%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6301603317260742 seconds
LR changed during epoch: 1.42e-04 -> 1.27e-04
total runtime to train this model was 27.2007417678833 seconds
Hyperparameteres for model 2 at epoch 53
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4081761837005615 seconds

Loss: 0.2274

Train Accuracy: 91.98%

Test Accuracy: 77.48%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6300840377807617 seconds

LR changed during epoch: 8.75e-05 -> 8.56e-05

total runtime to train this model was 27.150734663009644 seconds

Hyperparameteres for model 3 at epoch 53

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.654776096343994 seconds

Loss: 0.4629

Train Accuracy: 83.48%

Test Accuracy: 77.30%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.704352855682373 seconds

LR changed during epoch: 9.06e-05 -> 8.80e-05

total runtime to train this model was 27.26043128967285 seconds

Hyperparameteres for model 4 at epoch 53

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.434638261795044 seconds
Loss: 0.4551
Train Accuracy: 83.77%
Test Accuracy: 77.44%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 53 Summary:

=====

Time: 160.20s (Avg member: 32.04s)
Population Mean Accuracy: 77.21%
Best Member Accuracy: 78.48%
Mean Batch Size: 256
Mean Learning Rate: 4.04e-04
Mean Weight Decay: 0.086

=====

Epoch 54/70

--- Training Member 0 (Batch size: 256) ---
built data in 1.6120083332061768 seconds
LR changed during epoch: 3.86e-04 -> 5.14e-04
total runtime to train this model was 27.031920671463013 seconds
Hyperparameteres for model 0 at epoch 54
lr: 0.0006420527406879986

weight_decay: 0.15

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.580510139465332 seconds

Loss: 0.5891
Train Accuracy: 78.97%
Test Accuracy: 73.31%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.60107421875 seconds
LR changed during epoch: 5.79e-05 -> 5.17e-05
total runtime to train this model was 27.290514945983887 seconds
Hyperparameteres for model 1 at epoch 54
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.9584710597991943 seconds
Loss: 0.4069

Train Accuracy: 85.42%
Test Accuracy: 78.44%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.8242402076721191 seconds
LR changed during epoch: 1.27e-04 -> 1.14e-04
total runtime to train this model was 26.45668125152588 seconds
Hyperparameteres for model 2 at epoch 54
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0374860763549805 seconds
Loss: 0.2161
Train Accuracy: 92.17%
Test Accuracy: 77.95%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6115221977233887 seconds
LR changed during epoch: 8.56e-05 -> 8.37e-05
total runtime to train this model was 26.734359979629517 seconds
Hyperparameteres for model 3 at epoch 54
lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.3865928649902344 seconds
Loss: 0.4644
Train Accuracy: 83.65%
Test Accuracy: 77.37%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5770676136016846 seconds
LR changed during epoch: 8.80e-05 -> 8.54e-05
total runtime to train this model was 26.5574631690979 seconds
Hyperparameteres for model 4 at epoch 54
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4330790042877197 seconds

Loss: 0.4480

Train Accuracy: 84.07%

Test Accuracy: 77.66%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 54 Summary:

=====

Time: 156.97s (Avg member: 31.39s)

Population Mean Accuracy: 76.95%

Best Member Accuracy: 78.44%

Mean Batch Size: 256

Mean Learning Rate: 4.04e-04

Mean Weight Decay: 0.086

=====

Epoch 55/70

=====

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

built data in 1.6188461780548096 seconds

LR changed during epoch: 5.14e-04 -> 6.42e-04

total runtime to train this model was 26.275227308273315 seconds

Hyperparameteres for model 0 at epoch 55

lr: 0.0006420527406879986

weight_decay: 0.15

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0019540786743164 seconds

Loss: 0.6417

Train Accuracy: 77.37%

Test Accuracy: 72.53%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.7485883235931396 seconds

LR changed during epoch: 5.17e-05 -> 4.58e-05

total runtime to train this model was 26.71080732345581 seconds

Hyperparameteres for model 1 at epoch 55

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.516019344329834 seconds

Loss: 0.3922

Train Accuracy: 85.98%

Test Accuracy: 78.82%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6075873374938965 seconds

LR changed during epoch: 1.14e-04 -> 1.01e-04

total runtime to train this model was 26.67998743057251 seconds

Hyperparameteres for model 2 at epoch 55

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4282567501068115 seconds

Loss: 0.1995

Train Accuracy: 93.02%

Test Accuracy: 77.84%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.5894007682800293 seconds

LR changed during epoch: 8.37e-05 -> 8.16e-05

total runtime to train this model was 27.129969358444214 seconds

Hyperparameteres for model 3 at epoch 55

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.439774513244629 seconds

Loss: 0.4534

Train Accuracy: 83.83%

Test Accuracy: 77.43%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.7178564071655273 seconds

LR changed during epoch: 8.54e-05 -> 8.27e-05

total runtime to train this model was 26.819111585617065 seconds

Hyperparameteres for model 4 at epoch 55

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.553373098373413 seconds

Loss: 0.4430

Train Accuracy: 84.10%

Test Accuracy: 77.60%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

--- Population Update (Epoch 55) ---

==== PBT Exploit & Explore ===

Top performers: [78.82]

Bottom performers: [72.53]

Member 0: lr changed from 0.0006420527406879986 to 0.0005930612338304279

Member 0: drop_path changed from 0.0 to 0.02259071889364618

Member 0 copied from 1

LR=5.93e-04, WD=0.150, DropPath=0.023, Warmup=5 epochs, Batch=256

=====

Epoch 55 Summary:

=====

Time: 157.15s (Avg member: 31.43s)

Population Mean Accuracy: 76.84%

Best Member Accuracy: 78.82%

Mean Batch Size: 256

Mean Learning Rate: 3.94e-04

Mean Weight Decay: 0.086

=====

Epoch 56/70

=====

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

built data in 1.5968754291534424 seconds

LR changed during epoch: 6.05e-07 -> 1.19e-04

total runtime to train this model was 27.309993982315063 seconds

Hyperparameteres for model 0 at epoch 56

lr: 0.0005930612338304279

weight_decay: 0.15

drop_path: 0.02259071889364618

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4316136837005615 seconds

Loss: 0.3465

Train Accuracy: 87.79%

Test Accuracy: 77.50%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6390094757080078 seconds

LR changed during epoch: 4.58e-05 -> 4.03e-05

total runtime to train this model was 27.06646156311035 seconds

Hyperparameteres for model 1 at epoch 56

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4715161323547363 seconds

Loss: 0.3870

Train Accuracy: 86.23%

Test Accuracy: 78.45%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.5949606895446777 seconds

LR changed during epoch: 1.01e-04 -> 8.82e-05

total runtime to train this model was 27.067266702651978 seconds

Hyperparameteres for model 2 at epoch 56

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.189077615737915 seconds

Loss: 0.1901

Train Accuracy: 93.23%

Test Accuracy: 78.08%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.7484629154205322 seconds

LR changed during epoch: 8.16e-05 -> 7.96e-05

total runtime to train this model was 27.024011373519897 seconds

Hyperparameteres for model 3 at epoch 56

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.50719952583313 seconds
Loss: 0.4461
Train Accuracy: 84.26%
Test Accuracy: 77.49%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5771136283874512 seconds
LR changed during epoch: 8.27e-05 -> 7.99e-05
total runtime to train this model was 27.343587636947632 seconds
Hyperparameteres for model 4 at epoch 56
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.446258306503296 seconds
Loss: 0.4366
Train Accuracy: 84.37%
Test Accuracy: 77.69%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 56 Summary:

=====

Time: 158.28s (Avg member: 31.66s)
Population Mean Accuracy: 77.84%
Best Member Accuracy: 78.45%
Mean Batch Size: 256
Mean Learning Rate: 3.94e-04
Mean Weight Decay: 0.086

=====

Epoch 57/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6019175052642822 seconds
LR changed during epoch: 1.19e-04 -> 2.38e-04
total runtime to train this model was 26.989582300186157 seconds
Hyperparameteres for model 0 at epoch 57
lr: 0.0005930612338304279

weight_decay: 0.15

drop_path: 0.02259071889364618

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4348504543304443 seconds

Loss: 0.4187

Train Accuracy: 84.93%

Test Accuracy: 76.10%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.7464404106140137 seconds

LR changed during epoch: 4.03e-05 -> 3.50e-05

total runtime to train this model was 26.77943754196167 seconds

Hyperparameteres for model 1 at epoch 57

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.296535015106201 seconds

Loss: 0.3821

Train Accuracy: 86.42%

Test Accuracy: 79.05%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6384966373443604 seconds

LR changed during epoch: 8.82e-05 -> 7.66e-05

total runtime to train this model was 27.181884288787842 seconds

Hyperparameteres for model 2 at epoch 57

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.5648367404937744 seconds

Loss: 0.1781

Train Accuracy: 93.67%

Test Accuracy: 78.13%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.605713129043579 seconds

LR changed during epoch: 7.96e-05 -> 7.74e-05

total runtime to train this model was 27.3817195892334 seconds

Hyperparameteres for model 3 at epoch 57

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5742485523223877 seconds
Loss: 0.4394
Train Accuracy: 84.26%
Test Accuracy: 77.37%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.7167222499847412 seconds
LR changed during epoch: 7.99e-05 -> 7.71e-05
total runtime to train this model was 27.02117395401001 seconds
Hyperparameteres for model 4 at epoch 57
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.7444684505462646 seconds
Loss: 0.4278
Train Accuracy: 84.59%
Test Accuracy: 77.91%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====
Epoch 57 Summary:
=====

Time: 159.60s (Avg member: 31.92s)
Population Mean Accuracy: 77.71%
Best Member Accuracy: 79.05%
Mean Batch Size: 256
Mean Learning Rate: 3.94e-04
Mean Weight Decay: 0.086

=====
Epoch 58/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6388611793518066 seconds
LR changed during epoch: 2.38e-04 -> 3.56e-04
total runtime to train this model was 27.214764833450317 seconds
Hyperparameteres for model 0 at epoch 58
lr: 0.0005930612338304279

weight_decay: 0.15

drop_path: 0.02259071889364618

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.501964569091797 seconds
Loss: 0.4911
Train Accuracy: 82.57%
Test Accuracy: 75.43%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6251916885375977 seconds
LR changed during epoch: 3.50e-05 -> 3.01e-05
total runtime to train this model was 27.390733003616333 seconds
Hyperparameteres for model 1 at epoch 58
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622
drop_path: 0.16173938523674203

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5058960914611816 seconds
Loss: 0.3693
Train Accuracy: 86.90%
Test Accuracy: 79.08%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5793671607971191 seconds
LR changed during epoch: 7.66e-05 -> 6.57e-05
total runtime to train this model was 27.164758682250977 seconds
Hyperparameteres for model 2 at epoch 58
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915

warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.7677559852600098 seconds
Loss: 0.1709
Train Accuracy: 94.07%
Test Accuracy: 78.12%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8249671459197998 seconds
LR changed during epoch: 7.74e-05 -> 7.52e-05
total runtime to train this model was 26.622889041900635 seconds

Hyperparameteres for model 3 at epoch 58

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.017012119293213 seconds

Loss: 0.4329

Train Accuracy: 84.56%

Test Accuracy: 77.44%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.5803651809692383 seconds

LR changed during epoch: 7.71e-05 -> 7.43e-05

total runtime to train this model was 27.150801420211792 seconds

Hyperparameteres for model 4 at epoch 58

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.470226526260376 seconds

Loss: 0.4229

Train Accuracy: 84.91%

Test Accuracy: 77.16%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 58 Summary:

=====

Time: 158.34s (Avg member: 31.67s)

Population Mean Accuracy: 77.45%

Best Member Accuracy: 79.08%

Mean Batch Size: 256

Mean Learning Rate: 3.94e-04

Mean Weight Decay: 0.086

=====

Epoch 59/70

=====

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

built data in 1.588775634765625 seconds

LR changed during epoch: 3.56e-04 -> 4.75e-04

total runtime to train this model was 27.306277990341187 seconds

Hyperparameteres for model 0 at epoch 59

lr: 0.0005930612338304279

```
weight_decay: 0.15
drop_path: 0.02259071889364618
warmup_epochs: 5
batch_size: 256
_____ end of hyperparam printing _____
evaluation in 2.516831159591675 seconds
Loss: 0.5527
Train Accuracy: 80.14%
Test Accuracy: 72.58%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6948981285095215 seconds
LR changed during epoch: 3.01e-05 -> 2.56e-05
total runtime to train this model was 27.031601667404175 seconds
Hyperparameteres for model 1 at epoch 59
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622
drop_path: 0.16173938523674203
warmup_epochs: 5
batch_size: 256
_____ end of hyperparam printing _____
evaluation in 3.5997326374053955 seconds
Loss: 0.3622
Train Accuracy: 87.01%
Test Accuracy: 78.93%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6647288799285889 seconds
LR changed during epoch: 6.57e-05 -> 5.56e-05
total runtime to train this model was 27.230436086654663 seconds
Hyperparameteres for model 2 at epoch 59
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256
_____ end of hyperparam printing _____
evaluation in 2.4634945392608643 seconds
Loss: 0.1597
Train Accuracy: 94.49%
Test Accuracy: 78.01%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt
```

--- Training Member 3 (Batch size: 256) ---
built data in 1.5618059635162354 seconds
LR changed during epoch: 7.52e-05 -> 7.30e-05
total runtime to train this model was 27.391706943511963 seconds
Hyperparameteres for model 3 at epoch 59
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.434978723526001 seconds

Loss: 0.4309
Train Accuracy: 84.67%
Test Accuracy: 77.58%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5929057598114014 seconds
LR changed during epoch: 7.43e-05 -> 7.14e-05
total runtime to train this model was 27.187705516815186 seconds
Hyperparameteres for model 4 at epoch 59
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.600776195526123 seconds

Loss: 0.4107
Train Accuracy: 85.45%
Test Accuracy: 77.91%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 59 Summary:

=====

Time: 160.13s (Avg member: 32.03s)
Population Mean Accuracy: 77.00%
Best Member Accuracy: 78.93%
Mean Batch Size: 256
Mean Learning Rate: 3.94e-04
Mean Weight Decay: 0.086

=====

Epoch 60/70

=====

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

built data in 1.7124989032745361 seconds
LR changed during epoch: 4.75e-04 -> 5.93e-04
total runtime to train this model was 27.721786737442017 seconds
Hyperparameteres for model 0 at epoch 60
lr: 0.0005930612338304279

weight_decay: 0.15

drop_path: 0.02259071889364618

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8958284854888916 seconds
Loss: 0.6098
Train Accuracy: 78.27%
Test Accuracy: 70.71%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5982675552368164 seconds
LR changed during epoch: 2.56e-05 -> 2.14e-05
total runtime to train this model was 27.784764766693115 seconds
Hyperparameteres for model 1 at epoch 60
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.8861868381500244 seconds
Loss: 0.3559
Train Accuracy: 87.33%
Test Accuracy: 79.04%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5715835094451904 seconds
LR changed during epoch: 5.56e-05 -> 4.63e-05
total runtime to train this model was 27.23248815536499 seconds
Hyperparameteres for model 2 at epoch 60
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.8749024868011475 seconds

Loss: 0.1547
Train Accuracy: 94.56%
Test Accuracy: 77.75%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6627733707427979 seconds
LR changed during epoch: 7.30e-05 -> 7.07e-05
total runtime to train this model was 27.249643564224243 seconds
Hyperparameters for model 3 at epoch 60
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.533888578414917 seconds
Loss: 0.4187
Train Accuracy: 85.17%
Test Accuracy: 77.51%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.5808157920837402 seconds
LR changed during epoch: 7.14e-05 -> 6.85e-05
total runtime to train this model was 27.03356909751892 seconds
Hyperparameters for model 4 at epoch 60
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.452256679534912 seconds
Loss: 0.4107
Train Accuracy: 85.50%
Test Accuracy: 78.21%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

--- Population Update (Epoch 60) ---

==== PBT Exploit & Explore ====
Top performers: [79.04]
Bottom performers: [70.71]
Member 0: lr changed from 0.0005930612338304279 to 0.000804656220864785
Member 0: drop_path changed from 0.02259071889364618 to 0.014612439686033837
Member 0 copied from 1
LR=8.05e-04, WD=0.150, DropPath=0.015, Warmup=5 epochs, Batch=256

```
=====
Epoch 60 Summary:
```

```
Time: 161.33s (Avg member: 32.26s)
Population Mean Accuracy: 76.64%
Best Member Accuracy: 79.04%
Mean Batch Size: 256
Mean Learning Rate: 4.36e-04
Mean Weight Decay: 0.086
```

```
=====
Epoch 61/70
=====
```

```
--- Training Member 0 (Batch size: 256) ---
built data in 1.611840009689331 seconds
LR changed during epoch: 8.21e-07 -> 1.62e-04
total runtime to train this model was 27.161991357803345 seconds
Hyperparameteres for model 0 at epoch 61
lr: 0.000804656220864785
```

```
weight_decay: 0.15
```

```
drop_path: 0.014612439686033837
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 2.461733341217041 seconds
```

```
Loss: 0.3308
Train Accuracy: 88.33%
Test Accuracy: 77.07%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt
```

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

```
built data in 1.7746870517730713 seconds
LR changed during epoch: 2.14e-05 -> 1.76e-05
total runtime to train this model was 27.80998945236206 seconds
Hyperparameteres for model 1 at epoch 61
lr: 0.0003577601982010012
```

```
weight_decay: 0.04172655668585622
```

```
drop_path: 0.16173938523674203
```

```
warmup_epochs: 5
```

```
batch_size: 256
```

```
_____ end of hyperparam printing _____
evaluation in 3.080509662628174 seconds
```

```
Loss: 0.3533
Train Accuracy: 87.35%
Test Accuracy: 79.00%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt
```

```
--- Training Member 2 (Batch size: 256) ---
built data in 1.6080946922302246 seconds
```

LR changed during epoch: 4.63e-05 -> 3.79e-05
total runtime to train this model was 27.159480333328247 seconds
Hyperparameteres for model 2 at epoch 61
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.588592290878296 seconds

Loss: 0.1454
Train Accuracy: 94.93%
Test Accuracy: 78.35%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.6331794261932373 seconds
LR changed during epoch: 7.07e-05 -> 6.83e-05
total runtime to train this model was 27.38385534286499 seconds
Hyperparameteres for model 3 at epoch 61
lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.655029058456421 seconds

Loss: 0.4181
Train Accuracy: 85.07%
Test Accuracy: 77.64%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.8107714653015137 seconds
LR changed during epoch: 6.85e-05 -> 6.56e-05
total runtime to train this model was 26.94501256942749 seconds
Hyperparameteres for model 4 at epoch 61
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.402515411376953 seconds
Loss: 0.4046

Train Accuracy: 85.56%
Test Accuracy: 77.71%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 61 Summary:

=====

Time: 160.37s (Avg member: 32.07s)
Population Mean Accuracy: 77.95%
Best Member Accuracy: 79.00%
Mean Batch Size: 256
Mean Learning Rate: 4.36e-04
Mean Weight Decay: 0.086

=====

Epoch 62/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.5559334754943848 seconds
LR changed during epoch: 1.62e-04 -> 3.23e-04
total runtime to train this model was 27.512579441070557 seconds
Hyperparameteres for model 0 at epoch 62
lr: 0.000804656220864785

weight_decay: 0.15

drop_path: 0.014612439686033837

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4458329677581787 seconds

Loss: 0.4438
Train Accuracy: 84.14%
Test Accuracy: 75.40%
Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.601682186126709 seconds
LR changed during epoch: 1.76e-05 -> 1.42e-05
total runtime to train this model was 27.275609016418457 seconds
Hyperparameteres for model 1 at epoch 62
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.530473470687866 seconds
Loss: 0.3491
Train Accuracy: 87.70%
Test Accuracy: 79.04%

Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5736498832702637 seconds
LR changed during epoch: 3.79e-05 -> 3.02e-05
total runtime to train this model was 27.781708478927612 seconds
Hyperparameteres for model 2 at epoch 62
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037
drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.58573579788208 seconds
Loss: 0.1396
Train Accuracy: 95.21%
Test Accuracy: 78.29%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.644090175628662 seconds
LR changed during epoch: 6.83e-05 -> 6.59e-05
total runtime to train this model was 27.568548917770386 seconds
Hyperparameteres for model 3 at epoch 62
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4517853260040283 seconds
Loss: 0.4140
Train Accuracy: 85.33%
Test Accuracy: 77.59%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.587700366973877 seconds
LR changed during epoch: 6.56e-05 -> 6.27e-05
total runtime to train this model was 27.834389686584473 seconds
Hyperparameteres for model 4 at epoch 62
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.489823341369629 seconds

Loss: 0.3997
Train Accuracy: 85.76%
Test Accuracy: 78.01%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 62 Summary:

=====

Time: 160.72s (Avg member: 32.14s)
Population Mean Accuracy: 77.67%
Best Member Accuracy: 79.04%
Mean Batch Size: 256
Mean Learning Rate: 4.36e-04
Mean Weight Decay: 0.086

=====

Epoch 63/70

=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.6037042140960693 seconds
LR changed during epoch: 3.23e-04 -> 4.84e-04
total runtime to train this model was 27.222142219543457 seconds
Hyperparameteres for model 0 at epoch 63
lr: 0.000804656220864785

weight_decay: 0.15

drop_path: 0.014612439686033837

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.718485116958618 seconds

Loss: 0.5429
Train Accuracy: 80.47%
Test Accuracy: 73.77%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.713681936264038 seconds
LR changed during epoch: 1.42e-05 -> 1.11e-05
total runtime to train this model was 26.887579202651978 seconds
Hyperparameteres for model 1 at epoch 63
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.004554033279419 seconds
Loss: 0.3371
Train Accuracy: 87.99%
Test Accuracy: 79.16%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.582920789718628 seconds
LR changed during epoch: 3.02e-05 -> 2.34e-05
total runtime to train this model was 27.08394956588745 seconds
Hyperparameteres for model 2 at epoch 63
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4541704654693604 seconds
Loss: 0.1346
Train Accuracy: 95.33%
Test Accuracy: 77.99%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.5575954914093018 seconds
LR changed during epoch: 6.59e-05 -> 6.35e-05
total runtime to train this model was 27.29886484146118 seconds
Hyperparameteres for model 3 at epoch 63
lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5359933376312256 seconds
Loss: 0.4027
Train Accuracy: 85.61%
Test Accuracy: 77.31%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6994876861572266 seconds
LR changed during epoch: 6.27e-05 -> 5.98e-05
total runtime to train this model was 26.363417863845825 seconds
Hyperparameteres for model 4 at epoch 63
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6168458461761475 seconds

Loss: 0.3957

Train Accuracy: 85.78%

Test Accuracy: 78.08%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 63 Summary:

=====

Time: 158.65s (Avg member: 31.73s)

Population Mean Accuracy: 77.26%

Best Member Accuracy: 79.16%

Mean Batch Size: 256

Mean Learning Rate: 4.36e-04

Mean Weight Decay: 0.086

=====

Epoch 64/70

=====

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

built data in 1.6263704299926758 seconds

LR changed during epoch: 4.84e-04 -> 6.45e-04

total runtime to train this model was 27.059118032455444 seconds

Hyperparameteres for model 0 at epoch 64

lr: 0.000804656220864785

weight_decay: 0.15

drop_path: 0.014612439686033837

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4341814517974854 seconds

Loss: 0.6175

Train Accuracy: 77.77%

Test Accuracy: 69.66%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.599644422531128 seconds

LR changed during epoch: 1.11e-05 -> 8.44e-06

total runtime to train this model was 27.01362681388855 seconds

Hyperparameteres for model 1 at epoch 64

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.490455389022827 seconds

Loss: 0.3411

Train Accuracy: 87.89%

Test Accuracy: 79.30%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.643721103668213 seconds

LR changed during epoch: 2.34e-05 -> 1.75e-05

total runtime to train this model was 26.712603092193604 seconds

Hyperparameteres for model 2 at epoch 64

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.603229522705078 seconds

Loss: 0.1304

Train Accuracy: 95.51%

Test Accuracy: 78.33%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.784343957901001 seconds

LR changed during epoch: 6.35e-05 -> 6.11e-05

total runtime to train this model was 26.922675132751465 seconds

Hyperparameteres for model 3 at epoch 64

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.1786692142486572 seconds

Loss: 0.3957

Train Accuracy: 85.93%

Test Accuracy: 77.90%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.631291389465332 seconds

LR changed during epoch: 5.98e-05 -> 5.69e-05

total runtime to train this model was 26.996081829071045 seconds

Hyperparameteres for model 4 at epoch 64

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.51804780960083 seconds

Loss: 0.3841

Train Accuracy: 86.31%

Test Accuracy: 78.11%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 64 Summary:

=====

Time: 157.45s (Avg member: 31.49s)

Population Mean Accuracy: 76.66%

Best Member Accuracy: 79.30%

Mean Batch Size: 256

Mean Learning Rate: 4.36e-04

Mean Weight Decay: 0.086

=====

Epoch 65/70

=====

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

built data in 1.6009080410003662 seconds

LR changed during epoch: 6.45e-04 -> 8.05e-04

total runtime to train this model was 26.920151472091675 seconds

Hyperparameteres for model 0 at epoch 65

lr: 0.000804656220864785

weight_decay: 0.15

drop_path: 0.014612439686033837

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.467512369155884 seconds

Loss: 0.6818

Train Accuracy: 75.62%

Test Accuracy: 71.30%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.665008544921875 seconds

LR changed during epoch: 8.44e-06 -> 6.17e-06

total runtime to train this model was 26.485875129699707 seconds

Hyperparameteres for model 1 at epoch 65

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.7480337619781494 seconds

Loss: 0.3350

Train Accuracy: 88.21%

Test Accuracy: 79.26%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.711040735244751 seconds

LR changed during epoch: 1.75e-05 -> 1.25e-05

total runtime to train this model was 27.6394522190094 seconds

Hyperparameteres for model 2 at epoch 65

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.46923828125 seconds

Loss: 0.1283

Train Accuracy: 95.56%

Test Accuracy: 78.39%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.5936682224273682 seconds

LR changed during epoch: 6.11e-05 -> 5.86e-05

total runtime to train this model was 27.44666576385498 seconds

Hyperparameteres for model 3 at epoch 65

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4538960456848145 seconds

Loss: 0.3931

Train Accuracy: 86.00%

Test Accuracy: 77.66%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.7093536853790283 seconds

LR changed during epoch: 5.69e-05 -> 5.40e-05

total runtime to train this model was 27.367809772491455 seconds

Hyperparameteres for model 4 at epoch 65

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 3.3573036193847656 seconds

Loss: 0.3802

Train Accuracy: 86.38%

Test Accuracy: 78.29%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

--- Population Update (Epoch 65) ---

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

Top performers: [79.26]

Bottom performers: [71.3]

Member 0: lr changed from 0.000804656220864785 to 0.0010000000000000002

Member 0: weight_decay changed from 0.15 to 0.14942590353727653

Member 0: drop_path changed from 0.014612439686033837 to 0.0

Member 0 copied from 1

LR=1.00e-03, WD=0.149, DropPath=0.000, Warmup=5 epochs, Batch=256

=====

Epoch 65 Summary:

=====

Time: 159.93s (Avg member: 31.98s)

Population Mean Accuracy: 76.98%

Best Member Accuracy: 79.26%

Mean Batch Size: 256

Mean Learning Rate: 4.75e-04

Mean Weight Decay: 0.086

=====

Epoch 66/70

=====

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

built data in 1.7444212436676025 seconds

LR changed during epoch: 1.02e-06 -> 2.01e-04

total runtime to train this model was 27.46772527694702 seconds

Hyperparameteres for model 0 at epoch 66

lr: 0.0010000000000000002

weight_decay: 0.14942590353727653

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5030057430267334 seconds
Loss: 0.3354
Train Accuracy: 87.97%
Test Accuracy: 77.04%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6369483470916748 seconds
LR changed during epoch: 6.17e-06 -> 4.31e-06
total runtime to train this model was 27.46826195716858 seconds
Hyperparameteres for model 1 at epoch 66
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4859209060668945 seconds
Loss: 0.3321
Train Accuracy: 88.12%
Test Accuracy: 79.34%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6319401264190674 seconds
LR changed during epoch: 1.25e-05 -> 8.36e-06
total runtime to train this model was 27.72614312171936 seconds
Hyperparameteres for model 2 at epoch 66
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.319355010986328 seconds
Loss: 0.1253
Train Accuracy: 95.75%
Test Accuracy: 78.18%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.778038501739502 seconds
LR changed during epoch: 5.86e-05 -> 5.61e-05
total runtime to train this model was 27.93073868751526 seconds
Hyperparameteres for model 3 at epoch 66

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.547358274459839 seconds

Loss: 0.3861

Train Accuracy: 86.26%

Test Accuracy: 77.58%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6040935516357422 seconds

LR changed during epoch: 5.40e-05 -> 5.11e-05

total runtime to train this model was 28.178353548049927 seconds

Hyperparameteres for model 4 at epoch 66

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.616999387741089 seconds

Loss: 0.3747

Train Accuracy: 86.70%

Test Accuracy: 78.02%

Google Drive already mounted.

Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 66 Summary:

=====

Time: 161.90s (Avg member: 32.38s)

Population Mean Accuracy: 78.03%

Best Member Accuracy: 79.34%

Mean Batch Size: 256

Mean Learning Rate: 4.75e-04

Mean Weight Decay: 0.086

=====

Epoch 67/70

=====

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

built data in 1.6895430088043213 seconds

LR changed during epoch: 2.01e-04 -> 4.01e-04

total runtime to train this model was 27.752419471740723 seconds

Hyperparameteres for model 0 at epoch 67

lr: 0.0010000000000000002

weight_decay: 0.14942590353727653

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.924745798110962 seconds

Loss: 0.4744

Train Accuracy: 83.01%

Test Accuracy: 74.56%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6337003707885742 seconds

LR changed during epoch: 4.31e-06 -> 2.87e-06

total runtime to train this model was 27.941722631454468 seconds

Hyperparameteres for model 1 at epoch 67

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5533030033111572 seconds

Loss: 0.3264

Train Accuracy: 88.37%

Test Accuracy: 79.33%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6703975200653076 seconds

LR changed during epoch: 8.36e-06 -> 5.14e-06

total runtime to train this model was 27.626655101776123 seconds

Hyperparameteres for model 2 at epoch 67

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.544358968734741 seconds

Loss: 0.1220

Train Accuracy: 95.83%

Test Accuracy: 78.30%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

```
--- Training Member 3 (Batch size: 256) ---
built data in 1.6874630451202393 seconds
LR changed during epoch: 5.61e-05 -> 5.37e-05
total runtime to train this model was 27.76681876182556 seconds
Hyperparameteres for model 3 at epoch 67
lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6513140201568604 seconds
Loss: 0.3842
Train Accuracy: 86.38%
Test Accuracy: 77.48%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6690104007720947 seconds
LR changed during epoch: 5.11e-05 -> 4.83e-05
total runtime to train this model was 27.431341648101807 seconds
Hyperparameteres for model 4 at epoch 67
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.538048267364502 seconds
Loss: 0.3702
Train Accuracy: 86.80%
Test Accuracy: 78.21%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====
Epoch 67 Summary:
=====
Time: 163.31s (Avg member: 32.66s)
Population Mean Accuracy: 77.58%
Best Member Accuracy: 79.33%
Mean Batch Size: 256
Mean Learning Rate: 4.75e-04
Mean Weight Decay: 0.086

=====
Epoch 68/70
=====

--- Training Member 0 (Batch size: 256) ---
built data in 1.588538408279419 seconds
```

LR changed during epoch: 4.01e-04 -> 6.01e-04
total runtime to train this model was 27.47461223602295 seconds
Hyperparameteres for model 0 at epoch 68
lr: 0.00100000000000000002

weight_decay: 0.14942590353727653

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.4965896606445312 seconds

Loss: 0.5879
Train Accuracy: 78.85%
Test Accuracy: 73.26%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6679210662841797 seconds
LR changed during epoch: 2.87e-06 -> 1.83e-06
total runtime to train this model was 27.465694665908813 seconds
Hyperparameteres for model 1 at epoch 68
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.887444019317627 seconds

Loss: 0.3288
Train Accuracy: 88.30%
Test Accuracy: 79.40%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.6112911701202393 seconds
LR changed during epoch: 5.14e-06 -> 2.84e-06
total runtime to train this model was 27.98989200592041 seconds
Hyperparameteres for model 2 at epoch 68
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5673444271087646 seconds
Loss: 0.1185

Train Accuracy: 95.96%
Test Accuracy: 78.17%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6744372844696045 seconds
LR changed during epoch: 5.37e-05 -> 5.12e-05
total runtime to train this model was 27.69213342666626 seconds
Hyperparameteres for model 3 at epoch 68
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5197019577026367 seconds
Loss: 0.3725
Train Accuracy: 86.79%
Test Accuracy: 77.66%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.667067527770996 seconds
LR changed during epoch: 4.83e-05 -> 4.54e-05
total runtime to train this model was 27.775272607803345 seconds
Hyperparameteres for model 4 at epoch 68
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.6568539142608643 seconds
Loss: 0.3648
Train Accuracy: 87.05%
Test Accuracy: 78.03%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 68 Summary:

=====

Time: 162.95s (Avg member: 32.59s)
Population Mean Accuracy: 77.30%
Best Member Accuracy: 79.40%
Mean Batch Size: 256
Mean Learning Rate: 4.75e-04
Mean Weight Decay: 0.086

=====

Epoch 69/70

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

built data in 1.671539068222046 seconds

LR changed during epoch: 6.01e-04 -> 8.01e-04

total runtime to train this model was 27.518346309661865 seconds

Hyperparameteres for model 0 at epoch 69

lr: 0.0010000000000000002

weight_decay: 0.14942590353727653

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.509045124053955 seconds

Loss: 0.6694

Train Accuracy: 75.93%

Test Accuracy: 70.49%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

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

built data in 1.6454601287841797 seconds

LR changed during epoch: 1.83e-06 -> 1.21e-06

total runtime to train this model was 28.026297092437744 seconds

Hyperparameteres for model 1 at epoch 69

lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____

evaluation in 2.4774329662323 seconds

Loss: 0.3325

Train Accuracy: 88.29%

Test Accuracy: 79.28%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

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

built data in 1.8134491443634033 seconds

LR changed during epoch: 2.84e-06 -> 1.46e-06

total runtime to train this model was 28.40755319595337 seconds

Hyperparameteres for model 2 at epoch 69

lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.129577875137329 seconds

Loss: 0.1185

Train Accuracy: 95.98%

Test Accuracy: 78.27%

Google Drive already mounted.

Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

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

built data in 1.645186185836792 seconds

LR changed during epoch: 5.12e-05 -> 4.87e-05

total runtime to train this model was 28.054060220718384 seconds

Hyperparameteres for model 3 at epoch 69

lr: 0.00010386772284068194

weight_decay: 0.15

drop_path: 0.1411670234699043

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.48117995262146 seconds

Loss: 0.3727

Train Accuracy: 86.65%

Test Accuracy: 77.73%

Google Drive already mounted.

Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

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

built data in 1.6441855430603027 seconds

LR changed during epoch: 4.54e-05 -> 4.26e-05

total runtime to train this model was 27.611576557159424 seconds

Hyperparameteres for model 4 at epoch 69

lr: 0.0001215923844007238

weight_decay: 0.053336043203415104

drop_path: 0.11635503803712788

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.742286205291748 seconds

Loss: 0.3615

Train Accuracy: 87.11%

Test Accuracy: 78.09%

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Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

=====

Epoch 69 Summary:

=====

Time: 162.65s (Avg member: 32.53s)

Population Mean Accuracy: 76.77%

Best Member Accuracy: 79.28%

Mean Batch Size: 256
Mean Learning Rate: 4.75e-04
Mean Weight Decay: 0.086

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

--- Training Member 0 (Batch size: 256) ---
built data in 1.7954366207122803 seconds
LR changed during epoch: 8.01e-04 -> 1.00e-03
total runtime to train this model was 27.334498167037964 seconds
Hyperparameteres for model 0 at epoch 70
lr: 0.00100000000000000002

weight_decay: 0.14942590353727653

drop_path: 0.0

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.839644432067871 seconds

Loss: 0.7385
Train Accuracy: 73.63%
Test Accuracy: 70.77%

Google Drive already mounted.

Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_637451.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.645503282546997 seconds
LR changed during epoch: 1.21e-06 -> 1.00e-06
total runtime to train this model was 27.505370378494263 seconds
Hyperparameteres for model 1 at epoch 70
lr: 0.0003577601982010012

weight_decay: 0.04172655668585622

drop_path: 0.16173938523674203

warmup_epochs: 5

batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.5506036281585693 seconds

Loss: 0.3303
Train Accuracy: 88.25%
Test Accuracy: 79.28%

Google Drive already mounted.

Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_637451.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.616222858428955 seconds
LR changed during epoch: 1.46e-06 -> 1.00e-06
total runtime to train this model was 27.459582805633545 seconds
Hyperparameteres for model 2 at epoch 70
lr: 0.0007933005074965923

weight_decay: 0.03452138644748037

drop_path: 0.04112294412880915
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.613757848739624 seconds
Loss: 0.1226
Train Accuracy: 95.75%
Test Accuracy: 78.30%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_637451.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7902112007141113 seconds
LR changed during epoch: 4.87e-05 -> 4.62e-05
total runtime to train this model was 27.62352442741394 seconds
Hyperparameteres for model 3 at epoch 70
lr: 0.00010386772284068194

weight_decay: 0.15
drop_path: 0.1411670234699043
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 3.0853431224823 seconds
Loss: 0.3658
Train Accuracy: 87.07%
Test Accuracy: 77.96%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_637451.pt

--- Training Member 4 (Batch size: 256) ---
built data in 1.6229708194732666 seconds
LR changed during epoch: 4.26e-05 -> 3.99e-05
total runtime to train this model was 27.358242511749268 seconds
Hyperparameteres for model 4 at epoch 70
lr: 0.0001215923844007238

weight_decay: 0.053336043203415104
drop_path: 0.11635503803712788
warmup_epochs: 5
batch_size: 256

_____ end of hyperparam printing _____
evaluation in 2.498344659805298 seconds
Loss: 0.3573
Train Accuracy: 87.34%
Test Accuracy: 78.20%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_637451.pt

--- Population Update (Epoch 70) ---

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

Top performers: [79.28]

Bottom performers: [70.77]

Member 0: lr changed from 0.001000000000000002 to 0.0007063807949284619

Member 0: weight_decay changed from 0.14942590353727653 to 0.15

Member 0 copied from 1

LR=7.06e-04, WD=0.150, DropPath=0.000, Warmup=5 epochs, Batch=256

=====
Epoch 70 Summary:
=====

Time: 160.61s (Avg member: 32.12s)

Population Mean Accuracy: 76.90%

Best Member Accuracy: 79.28%

Mean Batch Size: 256

Mean Learning Rate: 4.17e-04

Mean Weight Decay: 0.086

=====
PBT TRAINING COMPLETE
=====

Best member: 1

Best accuracy: 79.28%

Best hyperparameters:

Learning Rate: 3.58e-04

Weight Decay: 0.042

Drop Path Rate: 0.162

Warmup Epochs: 5

Batch Size: 256

=====
PBT TIMING REPORT
=====

Overall Statistics Value

Total runtime 11181.59s (186.36 min)

Number of epochs 70

Number of population updates 14

Epoch Timing Value

Average epoch time 159.73s

Std epoch time 2.27s

Min epoch time 154.66s (epoch 35)

Max epoch time 163.63s (epoch 48)

Member Training Timing Value

Average member time per epoch 31.95s

Total training time 11180.86s

Training efficiency 100.0%

Population Update Timing Value

Average update time 0.01s

Total update time 0.19s

Update efficiency 0.0%

Batch Size Analysis Avg Time Samples

```
=====
```

Batch size 256 31.95s 350

Per-Member Statistics	Avg Time	Total Time
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```
=====
```

Member 0	31.91s	2233.90s
Member 1	31.91s	2233.58s
Member 2	32.01s	2240.36s
Member 3	31.98s	2238.58s
Member 4	31.92s	2234.44s

```
=====
```

Experiment completed successfully!

Results saved to: pbt_vit_timing_results.png

Detailed timing saved to: pbt_detailed_timing.png