

Starting PBT ViT Experiment with Timing...

Note: This will train ViT-Small models on CIFAR-10

Each member may have different batch sizes

Using device: cuda

Google Drive already mounted.

/tmp/ipython-input-3243781862.py:864: FutureWarning:

`torch.cuda.amp.GradScaler(args...)` is deprecated. Please use

`torch.amp.GradScaler('cuda', args...)` instead.

scaler = torch.cuda.amp.GradScaler(enabled=torch.cuda.is_available())

Starting PBT Training for ViT-Small...

Population size: 5

Total epochs: 60

Exploit interval: 5 epochs

Checkpoints will be saved to: /content/drive/MyDrive/Colab_Checkpoints

=====

Epoch 1/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.6910462379455566 seconds

/tmp/ipython-input-3243781862.py:711: FutureWarning:

`torch.cuda.amp.autocast(args...)` is deprecated. Please use

`torch.amp.autocast('cuda', args...)` instead.

with torch.cuda.amp.autocast(enabled=torch.cuda.is_available()):

LR changed during epoch: 1.57e-07 -> 1.23e-04

total runtime to train this model was 67.74593687057495 seconds

evaluation in 9.831156730651855 seconds

Loss: 1.8354

Train Accuracy: 31.36%

Test Accuracy: 36.24%

Google Drive already mounted.

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

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

built data in 1.7006444931030273 seconds

LR changed during epoch: 3.23e-06 -> 6.36e-04

total runtime to train this model was 52.05047965049744 seconds

evaluation in 10.126636028289795 seconds

Loss: 1.8528

Train Accuracy: 30.35%

Test Accuracy: 38.43%

Google Drive already mounted.

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

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

built data in 1.8856658935546875 seconds

LR changed during epoch: 3.22e-07 -> 6.34e-05

total runtime to train this model was 53.244343757629395 seconds

evaluation in 10.2661714553833 seconds

Loss: 1.9307

Train Accuracy: 27.89%

Test Accuracy: 36.48%

Google Drive already mounted.

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

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

built data in 1.6608784198760986 seconds

LR changed during epoch: 4.22e-06 -> 8.31e-04

total runtime to train this model was 53.65997624397278 seconds

evaluation in 10.412400960922241 seconds

Loss: 1.8400

Train Accuracy: 30.98%

Test Accuracy: 41.50%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.664496660232544 seconds

LR changed during epoch: 4.45e-09 -> 3.48e-06

total runtime to train this model was 71.67662286758423 seconds

evaluation in 10.408674240112305 seconds

Loss: 2.0437

Train Accuracy: 24.07%

Test Accuracy: 30.18%

Google Drive already mounted.

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

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Epoch 1 Summary:

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Time: 362.81s (Avg member: 72.56s)

Population Mean Accuracy: 36.57%

Best Member Accuracy: 41.50%

Mean Batch Size: 179

Mean Learning Rate: 1.26e-03

Mean Weight Decay: 0.198

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Epoch 2/60

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--- Training Member 0 (Batch size: 64) ---

built data in 1.659240961074829 seconds

LR changed during epoch: 1.23e-04 -> 2.45e-04

total runtime to train this model was 72.11389684677124 seconds

evaluation in 10.416075468063354 seconds

Loss: 1.4871

Train Accuracy: 45.34%

Test Accuracy: 49.65%

Google Drive already mounted.

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

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

built data in 1.6293222904205322 seconds

LR changed during epoch: 6.36e-04 -> 1.27e-03

total runtime to train this model was 53.639296531677246 seconds

evaluation in 10.548120260238647 seconds

Loss: 1.5829

Train Accuracy: 41.73%

Test Accuracy: 42.91%

Google Drive already mounted.

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

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

built data in 1.797334909439087 seconds

LR changed during epoch: 6.34e-05 -> 1.26e-04

total runtime to train this model was 53.792662382125854 seconds

evaluation in 10.320266485214233 seconds

Loss: 1.6730

Train Accuracy: 38.01%

Test Accuracy: 38.84%

Google Drive already mounted.

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

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

built data in 1.6421592235565186 seconds

LR changed during epoch: 8.31e-04 -> 1.66e-03

total runtime to train this model was 53.73703145980835 seconds

evaluation in 10.370533227920532 seconds

Loss: 1.6122

Train Accuracy: 40.64%

Test Accuracy: 37.50%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.7072913646697998 seconds

LR changed during epoch: 3.48e-06 -> 6.97e-06

total runtime to train this model was 72.03878402709961 seconds

evaluation in 10.381257057189941 seconds

Loss: 1.8053

Train Accuracy: 33.03%

Test Accuracy: 34.92%

Google Drive already mounted.

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

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Epoch 2 Summary:

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Time: 370.19s (Avg member: 74.04s)

Population Mean Accuracy: 40.76%

Best Member Accuracy: 49.65%

Mean Batch Size: 179

Mean Learning Rate: 1.26e-03

Mean Weight Decay: 0.198

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Epoch 3/60

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--- Training Member 0 (Batch size: 64) ---

built data in 1.6814026832580566 seconds

LR changed during epoch: 2.45e-04 -> 3.67e-04
total runtime to train this model was 71.6311366558075 seconds
evaluation in 10.432424545288086 seconds

Loss: 1.3787
Train Accuracy: 49.92%
Test Accuracy: 50.43%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6363492012023926 seconds
LR changed during epoch: 1.27e-03 -> 1.90e-03
total runtime to train this model was 53.50251579284668 seconds
evaluation in 10.486957788467407 seconds

Loss: 1.6163
Train Accuracy: 40.59%
Test Accuracy: 36.30%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.828622817993164 seconds
LR changed during epoch: 1.26e-04 -> 1.89e-04
total runtime to train this model was 53.881757736206055 seconds
evaluation in 10.35179591178894 seconds

Loss: 1.4586
Train Accuracy: 46.66%
Test Accuracy: 48.31%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6789116859436035 seconds
LR changed during epoch: 1.66e-03 -> 2.48e-03
total runtime to train this model was 53.720993995666504 seconds
evaluation in 10.378907203674316 seconds

Loss: 1.6499
Train Accuracy: 39.23%
Test Accuracy: 44.49%
Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---
built data in 1.6530177593231201 seconds
LR changed during epoch: 6.97e-06 -> 1.04e-05
total runtime to train this model was 71.48011994361877 seconds
evaluation in 10.32593321800232 seconds

Loss: 1.7001

Train Accuracy: 37.20%

Test Accuracy: 38.96%

Google Drive already mounted.

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

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Epoch 3 Summary:

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Time: 369.10s (Avg member: 73.82s)

Population Mean Accuracy: 43.70%

Best Member Accuracy: 50.43%

Mean Batch Size: 179

Mean Learning Rate: 1.26e-03

Mean Weight Decay: 0.198

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Epoch 4/60

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--- Training Member 0 (Batch size: 64) ---

built data in 1.6628239154815674 seconds

LR changed during epoch: 3.67e-04 -> 4.90e-04

total runtime to train this model was 71.87278604507446 seconds

evaluation in 10.427547216415405 seconds

Loss: 1.3459

Train Accuracy: 51.17%

Test Accuracy: 51.33%

Google Drive already mounted.

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

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

built data in 1.6174137592315674 seconds

LR changed during epoch: 1.90e-03 -> 2.53e-03

total runtime to train this model was 53.29587650299072 seconds
evaluation in 10.431150913238525 seconds

Loss: 1.6609

Train Accuracy: 39.02%

Test Accuracy: 43.90%

Google Drive already mounted.

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

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

built data in 1.797278881072998 seconds

LR changed during epoch: 1.89e-04 -> 2.53e-04

total runtime to train this model was 54.08845853805542 seconds
evaluation in 10.54963207244873 seconds

Loss: 1.3138

Train Accuracy: 52.35%

Test Accuracy: 54.82%

Google Drive already mounted.

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

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

built data in 1.651475191116333 seconds

LR changed during epoch: 2.48e-03 -> 2.48e-03

total runtime to train this model was 53.665703535079956 seconds
evaluation in 10.371397733688354 seconds

Loss: 1.5990

Train Accuracy: 41.57%

Test Accuracy: 44.88%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.645005702972412 seconds

LR changed during epoch: 1.04e-05 -> 1.39e-05

total runtime to train this model was 71.33635807037354 seconds
evaluation in 10.365839719772339 seconds

Loss: 1.6178

Train Accuracy: 40.49%

Test Accuracy: 41.08%

Google Drive already mounted.

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

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Epoch 4 Summary:
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Time: 369.37s (Avg member: 73.87s)

Population Mean Accuracy: 47.20%

Best Member Accuracy: 54.82%

Mean Batch Size: 179

Mean Learning Rate: 1.26e-03

Mean Weight Decay: 0.198

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Epoch 5/60
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--- Training Member 0 (Batch size: 64) ---

built data in 1.6738083362579346 seconds

LR changed during epoch: 4.90e-04 -> 6.12e-04

total runtime to train this model was 71.8684401512146 seconds

evaluation in 10.371740102767944 seconds

Loss: 1.3106

Train Accuracy: 52.42%

Test Accuracy: 53.64%

Google Drive already mounted.

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

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

built data in 1.6430442333221436 seconds

LR changed during epoch: 2.53e-03 -> 2.53e-03

total runtime to train this model was 53.28509998321533 seconds

evaluation in 10.34709358215332 seconds

Loss: 1.5942

Train Accuracy: 41.27%

Test Accuracy: 47.65%

Google Drive already mounted.

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

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

built data in 1.7160773277282715 seconds

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

total runtime to train this model was 53.83716893196106 seconds

evaluation in 10.629502534866333 seconds

Loss: 1.2334
Train Accuracy: 55.36%
Test Accuracy: 57.55%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6448190212249756 seconds
LR changed during epoch: 2.48e-03 -> 2.47e-03
total runtime to train this model was 53.87436890602112 seconds
evaluation in 10.285527467727661 seconds
Loss: 1.4901
Train Accuracy: 45.71%
Test Accuracy: 49.74%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6558632850646973 seconds
LR changed during epoch: 1.39e-05 -> 1.74e-05
total runtime to train this model was 71.68827414512634 seconds
evaluation in 10.359016180038452 seconds
Loss: 1.5342
Train Accuracy: 44.12%
Test Accuracy: 44.92%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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

==== PBT Exploit & Explore ====
Top performers: [57.55]
Bottom performers: [44.92]
Member 4: LR changed from 3.13e-05 to 1.03e-04
Member 4 copied from 2
LR=1.03e-04, WD=0.199, DropPath=0.068, Warmup=10 epochs, Batch=64

=====
Epoch 5 Summary:
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Time: 369.49s (Avg member: 73.90s)

Population Mean Accuracy: 50.70%
Best Member Accuracy: 57.55%
Mean Batch Size: 179
Mean Learning Rate: 1.27e-03
Mean Weight Decay: 0.201

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Epoch 6/60

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--- Training Member 0 (Batch size: 64) ---
built data in 1.6492388248443604 seconds
LR changed during epoch: 6.12e-04 -> 6.12e-04
total runtime to train this model was 71.84063386917114 seconds
evaluation in 10.379885196685791 seconds

Loss: 1.2479
Train Accuracy: 55.25%
Test Accuracy: 57.93%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6612861156463623 seconds
LR changed during epoch: 2.53e-03 -> 2.52e-03
total runtime to train this model was 53.39429020881653 seconds
evaluation in 10.339219331741333 seconds

Loss: 1.5172
Train Accuracy: 44.61%
Test Accuracy: 46.75%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6661312580108643 seconds
LR changed during epoch: 3.16e-04 -> 3.79e-04
total runtime to train this model was 53.87432265281677 seconds
evaluation in 10.502260446548462 seconds

Loss: 1.1648
Train Accuracy: 57.87%
Test Accuracy: 59.01%
Google Drive already mounted.

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

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

built data in 1.804253101348877 seconds

LR changed during epoch: 2.47e-03 -> 2.46e-03

total runtime to train this model was 53.868191719055176 seconds

evaluation in 10.287140607833862 seconds

Loss: 1.4094

Train Accuracy: 48.48%

Test Accuracy: 49.15%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6254503726959229 seconds

LR changed during epoch: 1.32e-08 -> 1.03e-05

total runtime to train this model was 71.67803502082825 seconds

evaluation in 10.397666454315186 seconds

Loss: 1.0773

Train Accuracy: 61.54%

Test Accuracy: 62.63%

Google Drive already mounted.

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

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Epoch 6 Summary:

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Time: 369.27s (Avg member: 73.85s)

Population Mean Accuracy: 55.09%

Best Member Accuracy: 62.63%

Mean Batch Size: 179

Mean Learning Rate: 1.27e-03

Mean Weight Decay: 0.201

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Epoch 7/60

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--- Training Member 0 (Batch size: 64) ---

built data in 1.6517279148101807 seconds

LR changed during epoch: 6.12e-04 -> 6.10e-04

total runtime to train this model was 71.6493616104126 seconds
evaluation in 10.329184532165527 seconds

Loss: 1.1724

Train Accuracy: 57.82%

Test Accuracy: 60.42%

Google Drive already mounted.

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

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

built data in 1.6385247707366943 seconds

LR changed during epoch: 2.52e-03 -> 2.51e-03

total runtime to train this model was 53.38000416755676 seconds

evaluation in 10.349584579467773 seconds

Loss: 1.4549

Train Accuracy: 46.90%

Test Accuracy: 49.43%

Google Drive already mounted.

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

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

built data in 1.6751997470855713 seconds

LR changed during epoch: 3.79e-04 -> 4.42e-04

total runtime to train this model was 53.81763696670532 seconds

evaluation in 10.538663387298584 seconds

Loss: 1.1335

Train Accuracy: 59.29%

Test Accuracy: 57.91%

Google Drive already mounted.

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

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

built data in 1.905287504196167 seconds

LR changed during epoch: 2.46e-03 -> 2.45e-03

total runtime to train this model was 53.850982666015625 seconds

evaluation in 10.310019731521606 seconds

Loss: 1.3694

Train Accuracy: 50.21%

Test Accuracy: 51.64%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---
built data in 1.650855541229248 seconds
LR changed during epoch: 1.03e-05 -> 2.06e-05
total runtime to train this model was 72.08018636703491 seconds
evaluation in 10.375834226608276 seconds
Loss: 1.0121
Train Accuracy: 63.55%
Test Accuracy: 63.55%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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Epoch 7 Summary:

=====

Time: 369.91s (Avg member: 73.98s)
Population Mean Accuracy: 56.59%
Best Member Accuracy: 63.55%
Mean Batch Size: 179
Mean Learning Rate: 1.27e-03
Mean Weight Decay: 0.201

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Epoch 8/60

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--- Training Member 0 (Batch size: 64) ---
built data in 1.656024694442749 seconds
LR changed during epoch: 6.10e-04 -> 6.08e-04
total runtime to train this model was 72.65836071968079 seconds
evaluation in 10.387639999389648 seconds
Loss: 1.1053
Train Accuracy: 60.42%
Test Accuracy: 62.85%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6545941829681396 seconds
LR changed during epoch: 2.51e-03 -> 2.50e-03
total runtime to train this model was 53.46475338935852 seconds
evaluation in 10.265344619750977 seconds

Loss: 1.4093
Train Accuracy: 48.65%
Test Accuracy: 49.68%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6657521724700928 seconds
LR changed during epoch: 4.42e-04 -> 5.05e-04
total runtime to train this model was 53.7429416179657 seconds
evaluation in 10.643001556396484 seconds
Loss: 1.0940
Train Accuracy: 60.92%
Test Accuracy: 61.74%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8412423133850098 seconds
LR changed during epoch: 2.45e-03 -> 2.43e-03
total runtime to train this model was 53.95230507850647 seconds
evaluation in 10.317676782608032 seconds
Loss: 1.3224
Train Accuracy: 51.86%
Test Accuracy: 54.16%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6408231258392334 seconds
LR changed during epoch: 2.06e-05 -> 3.09e-05
total runtime to train this model was 72.06541657447815 seconds
evaluation in 10.39032244682312 seconds
Loss: 0.9821
Train Accuracy: 64.74%
Test Accuracy: 64.56%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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Epoch 8 Summary:

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Time: 370.83s (Avg member: 74.17s)

Population Mean Accuracy: 58.60%

Best Member Accuracy: 64.56%

Mean Batch Size: 179

Mean Learning Rate: 1.27e-03

Mean Weight Decay: 0.201

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Epoch 9/60

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```

--- Training Member 0 (Batch size: 64) ---

built data in 1.6274747848510742 seconds

LR changed during epoch: 6.08e-04 -> 6.04e-04

total runtime to train this model was 72.17387843132019 seconds

evaluation in 10.387584447860718 seconds

Loss: 1.0466

Train Accuracy: 62.51%

Test Accuracy: 64.94%

Google Drive already mounted.

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

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

built data in 1.6694426536560059 seconds

LR changed during epoch: 2.50e-03 -> 2.48e-03

total runtime to train this model was 53.40629458427429 seconds

evaluation in 10.274025201797485 seconds

Loss: 1.3723

Train Accuracy: 50.08%

Test Accuracy: 51.97%

Google Drive already mounted.

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

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

built data in 1.6955249309539795 seconds

LR changed during epoch: 5.05e-04 -> 5.68e-04

total runtime to train this model was 53.846529483795166 seconds

evaluation in 10.557989120483398 seconds

Loss: 1.0760

Train Accuracy: 61.50%

Test Accuracy: 60.94%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8187026977539062 seconds
LR changed during epoch: 2.43e-03 -> 2.41e-03
total runtime to train this model was 54.03056311607361 seconds
evaluation in 10.419555902481079 seconds

Loss: 1.2903
Train Accuracy: 53.03%
Test Accuracy: 56.15%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6666858196258545 seconds
LR changed during epoch: 3.09e-05 -> 4.13e-05
total runtime to train this model was 72.1781096458435 seconds
evaluation in 10.53540587425232 seconds

Loss: 0.9626
Train Accuracy: 65.74%
Test Accuracy: 65.52%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 9 Summary:

=====

Time: 371.15s (Avg member: 74.23s)
Population Mean Accuracy: 59.90%
Best Member Accuracy: 65.52%
Mean Batch Size: 179
Mean Learning Rate: 1.27e-03
Mean Weight Decay: 0.201

=====

=====

Epoch 10/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.6626498699188232 seconds
LR changed during epoch: 6.04e-04 -> 6.00e-04
total runtime to train this model was 72.36626863479614 seconds
evaluation in 10.493653059005737 seconds
Loss: 0.9838
Train Accuracy: 64.98%
Test Accuracy: 65.66%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.683473825454712 seconds
LR changed during epoch: 2.48e-03 -> 2.46e-03
total runtime to train this model was 53.5476450920105 seconds
evaluation in 10.295788764953613 seconds
Loss: 1.3379
Train Accuracy: 51.41%
Test Accuracy: 52.85%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6466212272644043 seconds
LR changed during epoch: 5.68e-04 -> 6.30e-04
total runtime to train this model was 53.846962690353394 seconds
evaluation in 10.440118312835693 seconds
Loss: 1.0599
Train Accuracy: 62.08%
Test Accuracy: 63.27%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8039755821228027 seconds
LR changed during epoch: 2.41e-03 -> 2.39e-03
total runtime to train this model was 54.01986241340637 seconds
evaluation in 10.384599924087524 seconds
Loss: 1.2438
Train Accuracy: 55.23%
Test Accuracy: 56.61%
Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6492609977722168 seconds

LR changed during epoch: 4.13e-05 -> 5.16e-05

total runtime to train this model was 72.35614442825317 seconds

evaluation in 10.595378875732422 seconds

Loss: 0.9411

Train Accuracy: 66.58%

Test Accuracy: 63.77%

Google Drive already mounted.

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

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

==== PBT Exploit & Explore ===

Top performers: [65.66]

Bottom performers: [52.85]

Member 1: LR changed from 2.53e-03 to 2.86e-03

Member 1 copied from 0

LR=2.86e-03, WD=0.110, DropPath=0.269, Warmup=3 epochs, Batch=128

=====

Epoch 10 Summary:

=====

Time: 371.55s (Avg member: 74.31s)

Population Mean Accuracy: 60.43%

Best Member Accuracy: 65.66%

Mean Batch Size: 154

Mean Learning Rate: 1.34e-03

Mean Weight Decay: 0.193

=====

Epoch 11/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.632521629333496 seconds

LR changed during epoch: 6.00e-04 -> 5.94e-04

total runtime to train this model was 72.41946935653687 seconds

evaluation in 10.472323417663574 seconds

Loss: 0.9433

Train Accuracy: 66.61%
Test Accuracy: 68.40%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.7033648490905762 seconds
LR changed during epoch: 2.44e-06 -> 9.55e-04
total runtime to train this model was 58.98357033729553 seconds
evaluation in 10.48056697845459 seconds

Loss: 0.8999
Train Accuracy: 68.04%
Test Accuracy: 65.73%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7495217323303223 seconds
LR changed during epoch: 6.30e-04 -> 6.30e-04
total runtime to train this model was 53.93103885650635 seconds
evaluation in 10.346946239471436 seconds

Loss: 1.0221
Train Accuracy: 63.45%
Test Accuracy: 64.95%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6560497283935547 seconds
LR changed during epoch: 2.39e-03 -> 2.36e-03
total runtime to train this model was 54.015127420425415 seconds
evaluation in 10.401580333709717 seconds

Loss: 1.2135
Train Accuracy: 56.34%
Test Accuracy: 57.94%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6774399280548096 seconds

LR changed during epoch: 5.16e-05 -> 6.19e-05
total runtime to train this model was 71.87029814720154 seconds
evaluation in 10.366517543792725 seconds
Loss: 0.9285
Train Accuracy: 66.87%
Test Accuracy: 67.70%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 11 Summary:

=====

Time: 376.52s (Avg member: 75.30s)
Population Mean Accuracy: 64.94%
Best Member Accuracy: 68.40%
Mean Batch Size: 154
Mean Learning Rate: 1.34e-03
Mean Weight Decay: 0.193

=====

Epoch 12/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6026408672332764 seconds
LR changed during epoch: 5.94e-04 -> 5.88e-04
total runtime to train this model was 71.92212224006653 seconds
evaluation in 10.367321729660034 seconds
Loss: 0.8954
Train Accuracy: 68.55%
Test Accuracy: 69.10%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6332592964172363 seconds
LR changed during epoch: 9.55e-04 -> 1.91e-03
total runtime to train this model was 58.07278394699097 seconds
evaluation in 10.308589458465576 seconds
Loss: 1.0251
Train Accuracy: 63.52%
Test Accuracy: 62.02%

Google Drive already mounted.

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

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

built data in 1.6507632732391357 seconds

LR changed during epoch: 6.30e-04 -> 6.28e-04

total runtime to train this model was 53.736212968826294 seconds

evaluation in 10.504495859146118 seconds

Loss: 0.9859

Train Accuracy: 65.03%

Test Accuracy: 64.28%

Google Drive already mounted.

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

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

built data in 1.8725152015686035 seconds

LR changed during epoch: 2.36e-03 -> 2.33e-03

total runtime to train this model was 54.03053617477417 seconds

evaluation in 10.356015920639038 seconds

Loss: 1.1745

Train Accuracy: 57.63%

Test Accuracy: 58.34%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6290819644927979 seconds

LR changed during epoch: 6.19e-05 -> 7.22e-05

total runtime to train this model was 71.90932989120483 seconds

evaluation in 10.68053412437439 seconds

Loss: 0.9154

Train Accuracy: 67.37%

Test Accuracy: 69.42%

Google Drive already mounted.

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

=====

Epoch 12 Summary:

=====

Time: 375.37s (Avg member: 75.07s)

Population Mean Accuracy: 64.63%
Best Member Accuracy: 69.42%
Mean Batch Size: 154
Mean Learning Rate: 1.34e-03
Mean Weight Decay: 0.193

=====

Epoch 13/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6369974613189697 seconds
LR changed during epoch: 5.88e-04 -> 5.81e-04
total runtime to train this model was 71.68101477622986 seconds
evaluation in 10.445786237716675 seconds

Loss: 0.8633
Train Accuracy: 69.41%
Test Accuracy: 69.35%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6328413486480713 seconds
LR changed during epoch: 1.91e-03 -> 2.86e-03
total runtime to train this model was 58.43851947784424 seconds
evaluation in 10.427957534790039 seconds

Loss: 1.0854
Train Accuracy: 61.35%
Test Accuracy: 63.18%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6506171226501465 seconds
LR changed during epoch: 6.28e-04 -> 6.25e-04
total runtime to train this model was 53.84165644645691 seconds
evaluation in 10.302280902862549 seconds

Loss: 0.9346
Train Accuracy: 66.93%
Test Accuracy: 67.49%
Google Drive already mounted.

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

--- Training Member 3 (Batch size: 256) ---
built data in 1.6461796760559082 seconds
LR changed during epoch: 2.33e-03 -> 2.30e-03
total runtime to train this model was 53.95413780212402 seconds
evaluation in 10.435462236404419 seconds

Loss: 1.1331
Train Accuracy: 58.96%
Test Accuracy: 59.01%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.7271759510040283 seconds
LR changed during epoch: 7.22e-05 -> 8.25e-05
total runtime to train this model was 71.79483270645142 seconds
evaluation in 10.359829664230347 seconds

Loss: 0.8983
Train Accuracy: 67.91%
Test Accuracy: 68.35%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 13 Summary:

=====

Time: 374.81s (Avg member: 74.96s)
Population Mean Accuracy: 65.48%
Best Member Accuracy: 69.35%
Mean Batch Size: 154
Mean Learning Rate: 1.34e-03
Mean Weight Decay: 0.193

=====

Epoch 14/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.603874683380127 seconds
LR changed during epoch: 5.81e-04 -> 5.73e-04

total runtime to train this model was 71.98141145706177 seconds
evaluation in 10.365947484970093 seconds
Loss: 0.8348
Train Accuracy: 70.71%
Test Accuracy: 71.91%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6492640972137451 seconds
LR changed during epoch: 2.86e-03 -> 2.85e-03
total runtime to train this model was 58.32646107673645 seconds
evaluation in 10.352336645126343 seconds
Loss: 1.0330
Train Accuracy: 63.07%
Test Accuracy: 63.41%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.5867352485656738 seconds
LR changed during epoch: 6.25e-04 -> 6.21e-04
total runtime to train this model was 53.64471936225891 seconds
evaluation in 10.483692407608032 seconds
Loss: 0.9016
Train Accuracy: 67.81%
Test Accuracy: 68.69%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7830116748809814 seconds
LR changed during epoch: 2.30e-03 -> 2.26e-03
total runtime to train this model was 54.116694927215576 seconds
evaluation in 10.276225328445435 seconds
Loss: 1.1052
Train Accuracy: 60.06%
Test Accuracy: 59.48%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6459331512451172 seconds
LR changed during epoch: 8.25e-05 -> 9.28e-05
total runtime to train this model was 71.88313698768616 seconds
evaluation in 10.367952108383179 seconds
Loss: 0.8717
Train Accuracy: 69.00%
Test Accuracy: 69.32%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 14 Summary:

=====

Time: 374.56s (Avg member: 74.91s)
Population Mean Accuracy: 66.56%
Best Member Accuracy: 71.91%
Mean Batch Size: 154
Mean Learning Rate: 1.34e-03
Mean Weight Decay: 0.193

=====

Epoch 15/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.692798376083374 seconds
LR changed during epoch: 5.73e-04 -> 5.64e-04
total runtime to train this model was 72.22528457641602 seconds
evaluation in 10.393027544021606 seconds
Loss: 0.8161
Train Accuracy: 71.16%
Test Accuracy: 70.64%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6615989208221436 seconds
LR changed during epoch: 2.85e-03 -> 2.85e-03
total runtime to train this model was 58.667847871780396 seconds
evaluation in 10.330793619155884 seconds

Loss: 0.9795
Train Accuracy: 65.33%
Test Accuracy: 65.76%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6515552997589111 seconds
LR changed during epoch: 6.21e-04 -> 6.15e-04

total runtime to train this model was 53.79995894432068 seconds
evaluation in 10.353643894195557 seconds

Loss: 0.8642
Train Accuracy: 69.18%
Test Accuracy: 67.26%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.645951271057129 seconds
LR changed during epoch: 2.26e-03 -> 2.22e-03
total runtime to train this model was 54.05571460723877 seconds
evaluation in 10.464751720428467 seconds

Loss: 1.0680
Train Accuracy: 61.68%
Test Accuracy: 60.84%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.8757266998291016 seconds
LR changed during epoch: 9.28e-05 -> 1.03e-04
total runtime to train this model was 72.38864374160767 seconds
evaluation in 10.491272449493408 seconds

Loss: 0.8567
Train Accuracy: 69.64%
Test Accuracy: 70.79%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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

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

Top performers: [70.79]

Bottom performers: [60.84]

Member 3: LR changed from 2.48e-03 to 7.79e-04

Member 3 copied from 4

LR=7.79e-04, WD=0.294, DropPath=0.005, Warmup=2 epochs, Batch=256

=====

Epoch 15 Summary:

=====

Time: 376.12s (Avg member: 75.22s)

Population Mean Accuracy: 67.06%

Best Member Accuracy: 70.79%

Mean Batch Size: 154

Mean Learning Rate: 9.96e-04

Mean Weight Decay: 0.200

=====

Epoch 16/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.8235468864440918 seconds

LR changed during epoch: 5.64e-04 -> 5.54e-04

total runtime to train this model was 72.54763436317444 seconds

evaluation in 10.40758466720581 seconds

Loss: 0.7888

Train Accuracy: 72.30%

Test Accuracy: 71.34%

Google Drive already mounted.

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

--- Training Member 1 (Batch size: 128) ---

built data in 1.7484841346740723 seconds

LR changed during epoch: 2.85e-03 -> 2.84e-03

total runtime to train this model was 58.71837043762207 seconds

evaluation in 10.356285572052002 seconds

Loss: 0.9486

Train Accuracy: 66.45%

Test Accuracy: 68.54%

Google Drive already mounted.

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

--- Training Member 2 (Batch size: 256) ---
built data in 1.6485366821289062 seconds
LR changed during epoch: 6.15e-04 -> 6.08e-04
total runtime to train this model was 53.72666621208191 seconds
evaluation in 10.478466987609863 seconds

Loss: 0.8297
Train Accuracy: 70.45%
Test Accuracy: 71.67%

Google Drive already mounted.

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

--- Training Member 3 (Batch size: 256) ---
built data in 1.6544439792633057 seconds
LR changed during epoch: 1.99e-06 -> 3.92e-04
total runtime to train this model was 54.22701287269592 seconds
evaluation in 10.396524667739868 seconds

Loss: 0.8040
Train Accuracy: 71.94%
Test Accuracy: 62.65%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---
built data in 1.6487619876861572 seconds
LR changed during epoch: 1.03e-04 -> 1.03e-04
total runtime to train this model was 71.27229833602905 seconds
evaluation in 10.343117475509644 seconds

Loss: 0.8308
Train Accuracy: 70.45%
Test Accuracy: 69.86%

Google Drive already mounted.

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

=====

Epoch 16 Summary:

=====

Time: 375.96s (Avg member: 75.19s)
Population Mean Accuracy: 68.81%

Best Member Accuracy: 71.67%
Mean Batch Size: 154
Mean Learning Rate: 9.96e-04
Mean Weight Decay: 0.200

=====

Epoch 17/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6374223232269287 seconds
LR changed during epoch: 5.54e-04 -> 5.43e-04
total runtime to train this model was 71.68012738227844 seconds
evaluation in 10.3355131149292 seconds

Loss: 0.7627
Train Accuracy: 73.14%
Test Accuracy: 70.97%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.659113883972168 seconds
LR changed during epoch: 2.84e-03 -> 2.82e-03
total runtime to train this model was 58.20426893234253 seconds
evaluation in 10.33115291595459 seconds

Loss: 0.9105
Train Accuracy: 67.80%
Test Accuracy: 69.98%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6564927101135254 seconds
LR changed during epoch: 6.08e-04 -> 6.00e-04
total runtime to train this model was 53.592660665512085 seconds
evaluation in 10.42087459564209 seconds

Loss: 0.8015
Train Accuracy: 71.55%
Test Accuracy: 73.58%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6677124500274658 seconds
LR changed during epoch: 3.92e-04 -> 7.79e-04
total runtime to train this model was 54.01215410232544 seconds
evaluation in 10.580652475357056 seconds
Loss: 0.9822
Train Accuracy: 65.19%
Test Accuracy: 62.53%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.704669713973999 seconds
LR changed during epoch: 1.03e-04 -> 1.03e-04
total runtime to train this model was 71.68788576126099 seconds
evaluation in 10.430391073226929 seconds
Loss: 0.7946
Train Accuracy: 72.06%
Test Accuracy: 71.88%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 17 Summary:

=====

Time: 374.40s (Avg member: 74.88s)
Population Mean Accuracy: 69.79%
Best Member Accuracy: 73.58%
Mean Batch Size: 154
Mean Learning Rate: 9.96e-04
Mean Weight Decay: 0.200

=====

Epoch 18/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.7838621139526367 seconds
LR changed during epoch: 5.43e-04 -> 5.32e-04
total runtime to train this model was 71.86184859275818 seconds
evaluation in 10.54312515258789 seconds

Loss: 0.7493
Train Accuracy: 73.66%
Test Accuracy: 74.48%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.7879152297973633 seconds
LR changed during epoch: 2.82e-03 -> 2.80e-03
total runtime to train this model was 58.48321509361267 seconds
evaluation in 10.438514232635498 seconds
Loss: 0.8923
Train Accuracy: 68.34%
Test Accuracy: 68.06%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.8079006671905518 seconds
LR changed during epoch: 6.00e-04 -> 5.91e-04
total runtime to train this model was 53.93816328048706 seconds
evaluation in 10.517744302749634 seconds
Loss: 0.7627
Train Accuracy: 73.16%
Test Accuracy: 73.35%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6430013179779053 seconds
LR changed during epoch: 7.79e-04 -> 7.79e-04
total runtime to train this model was 53.94532656669617 seconds
evaluation in 10.381402492523193 seconds
Loss: 1.0074
Train Accuracy: 64.11%
Test Accuracy: 64.08%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---

built data in 1.6296205520629883 seconds
LR changed during epoch: 1.03e-04 -> 1.02e-04
total runtime to train this model was 71.34510850906372 seconds
evaluation in 10.343299388885498 seconds
Loss: 0.7676
Train Accuracy: 73.09%
Test Accuracy: 72.31%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 18 Summary:

=====

Time: 375.81s (Avg member: 75.16s)
Population Mean Accuracy: 70.46%
Best Member Accuracy: 74.48%
Mean Batch Size: 154
Mean Learning Rate: 9.96e-04
Mean Weight Decay: 0.200

=====

Epoch 19/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.628645658493042 seconds
LR changed during epoch: 5.32e-04 -> 5.20e-04
total runtime to train this model was 71.34630966186523 seconds
evaluation in 10.32518744468689 seconds
Loss: 0.7353
Train Accuracy: 74.21%
Test Accuracy: 73.55%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6511709690093994 seconds
LR changed during epoch: 2.80e-03 -> 2.78e-03
total runtime to train this model was 58.34123182296753 seconds
evaluation in 10.346100568771362 seconds
Loss: 0.8728
Train Accuracy: 69.37%

Test Accuracy: 69.57%

Google Drive already mounted.

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

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

built data in 1.650766372680664 seconds

LR changed during epoch: 5.91e-04 -> 5.81e-04

total runtime to train this model was 53.60782718658447 seconds

evaluation in 10.654949188232422 seconds

Loss: 0.7336

Train Accuracy: 73.98%

Test Accuracy: 73.26%

Google Drive already mounted.

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

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

built data in 1.867020845413208 seconds

LR changed during epoch: 7.79e-04 -> 7.77e-04

total runtime to train this model was 54.12381839752197 seconds

evaluation in 10.703149557113647 seconds

Loss: 0.9328

Train Accuracy: 67.00%

Test Accuracy: 70.11%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6444406509399414 seconds

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

total runtime to train this model was 72.33073902130127 seconds

evaluation in 10.549157619476318 seconds

Loss: 0.7409

Train Accuracy: 73.95%

Test Accuracy: 74.77%

Google Drive already mounted.

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

=====

Epoch 19 Summary:

=====

Time: 375.17s (Avg member: 75.03s)
Population Mean Accuracy: 72.25%
Best Member Accuracy: 74.77%
Mean Batch Size: 154
Mean Learning Rate: 9.96e-04
Mean Weight Decay: 0.200

=====
Epoch 20/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.672522783279419 seconds
LR changed during epoch: 5.20e-04 -> 5.07e-04
total runtime to train this model was 72.52147150039673 seconds
evaluation in 10.490824222564697 seconds

Loss: 0.7205

Train Accuracy: 74.65%

Test Accuracy: 73.52%

Google Drive already mounted.

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

--- Training Member 1 (Batch size: 128) ---
built data in 1.7535040378570557 seconds
LR changed during epoch: 2.78e-03 -> 2.75e-03
total runtime to train this model was 58.82012104988098 seconds
evaluation in 10.524817943572998 seconds

Loss: 0.8516

Train Accuracy: 69.89%

Test Accuracy: 72.57%

Google Drive already mounted.

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

--- Training Member 2 (Batch size: 256) ---
built data in 1.7000243663787842 seconds
LR changed during epoch: 5.81e-04 -> 5.70e-04
total runtime to train this model was 53.92901659011841 seconds
evaluation in 10.320977210998535 seconds

Loss: 0.7121

Train Accuracy: 74.79%

Test Accuracy: 74.73%

Google Drive already mounted.

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

--- Training Member 3 (Batch size: 256) ---
built data in 1.6447207927703857 seconds
LR changed during epoch: 7.77e-04 -> 7.74e-04
total runtime to train this model was 53.9665105342865 seconds
evaluation in 10.36561369895935 seconds

Loss: 0.8785
Train Accuracy: 69.00%
Test Accuracy: 69.78%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---
built data in 1.6477973461151123 seconds
LR changed during epoch: 1.02e-04 -> 1.01e-04
total runtime to train this model was 71.62206840515137 seconds
evaluation in 10.370333433151245 seconds

Loss: 0.7094
Train Accuracy: 74.96%
Test Accuracy: 73.63%

Google Drive already mounted.

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

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

==== PBT Exploit & Explore ===

Top performers: [74.73]

Bottom performers: [69.78]

Member 3: LR changed from 7.79e-04 to 4.07e-04

Member 3 copied from 2

LR=4.07e-04, WD=0.296, DropPath=0.011, Warmup=2 epochs, Batch=256

=====

Epoch 20 Summary:

=====

Time: 375.85s (Avg member: 75.17s)

Population Mean Accuracy: 72.85%

Best Member Accuracy: 74.73%

Mean Batch Size: 154

Mean Learning Rate: 9.22e-04
Mean Weight Decay: 0.200

=====
Epoch 21/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6468095779418945 seconds
LR changed during epoch: 5.07e-04 -> 4.93e-04
total runtime to train this model was 72.08779573440552 seconds
evaluation in 10.383208751678467 seconds
Loss: 0.7002
Train Accuracy: 75.19%
Test Accuracy: 74.70%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6628150939941406 seconds
LR changed during epoch: 2.75e-03 -> 2.72e-03
total runtime to train this model was 58.57339525222778 seconds
evaluation in 10.3618643283844 seconds
Loss: 0.8366
Train Accuracy: 70.37%
Test Accuracy: 71.26%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6961610317230225 seconds
LR changed during epoch: 5.70e-04 -> 5.58e-04
total runtime to train this model was 53.847243547439575 seconds
evaluation in 10.372191429138184 seconds
Loss: 0.6866
Train Accuracy: 75.85%
Test Accuracy: 76.16%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

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

built data in 1.7525568008422852 seconds
LR changed during epoch: 1.04e-06 -> 2.05e-04
total runtime to train this model was 54.09794902801514 seconds
evaluation in 10.380147218704224 seconds
Loss: 0.5757
Train Accuracy: 79.64%
Test Accuracy: 78.31%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6656126976013184 seconds
LR changed during epoch: 1.01e-04 -> 9.95e-05
total runtime to train this model was 72.03761196136475 seconds
evaluation in 10.35926079750061 seconds
Loss: 0.6856
Train Accuracy: 75.88%
Test Accuracy: 74.16%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====
Epoch 21 Summary:
=====

Time: 375.54s (Avg member: 75.11s)
Population Mean Accuracy: 74.92%
Best Member Accuracy: 78.31%
Mean Batch Size: 154
Mean Learning Rate: 9.22e-04
Mean Weight Decay: 0.200

=====
Epoch 22/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6800391674041748 seconds
LR changed during epoch: 4.93e-04 -> 4.79e-04
total runtime to train this model was 71.99444913864136 seconds
evaluation in 10.363313436508179 seconds
Loss: 0.6882
Train Accuracy: 75.90%

Test Accuracy: 74.81%

Google Drive already mounted.

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

--- Training Member 1 (Batch size: 128) ---

built data in 1.6750140190124512 seconds

LR changed during epoch: 2.72e-03 -> 2.68e-03

total runtime to train this model was 58.60376524925232 seconds

evaluation in 10.328750133514404 seconds

Loss: 0.8194

Train Accuracy: 71.22%

Test Accuracy: 70.69%

Google Drive already mounted.

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

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

built data in 1.6965305805206299 seconds

LR changed during epoch: 5.58e-04 -> 5.45e-04

total runtime to train this model was 53.798890352249146 seconds

evaluation in 10.310920476913452 seconds

Loss: 0.6614

Train Accuracy: 76.60%

Test Accuracy: 76.80%

Google Drive already mounted.

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

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

built data in 1.6753172874450684 seconds

LR changed during epoch: 2.05e-04 -> 4.07e-04

total runtime to train this model was 53.87281155586243 seconds

evaluation in 10.36078429222107 seconds

Loss: 0.5963

Train Accuracy: 79.11%

Test Accuracy: 74.47%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.8163120746612549 seconds

LR changed during epoch: 9.95e-05 -> 9.82e-05

total runtime to train this model was 72.09822940826416 seconds
evaluation in 10.425992727279663 seconds

Loss: 0.6571

Train Accuracy: 76.95%

Test Accuracy: 77.00%

Google Drive already mounted.

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

=====

Epoch 22 Summary:

=====

Time: 376.31s (Avg member: 75.26s)

Population Mean Accuracy: 74.75%

Best Member Accuracy: 77.00%

Mean Batch Size: 154

Mean Learning Rate: 9.22e-04

Mean Weight Decay: 0.200

=====

Epoch 23/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.7174513339996338 seconds

LR changed during epoch: 4.79e-04 -> 4.64e-04

total runtime to train this model was 72.16145348548889 seconds

evaluation in 10.387935876846313 seconds

Loss: 0.6787

Train Accuracy: 76.14%

Test Accuracy: 73.26%

Google Drive already mounted.

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

--- Training Member 1 (Batch size: 128) ---

built data in 1.6487832069396973 seconds

LR changed during epoch: 2.68e-03 -> 2.64e-03

total runtime to train this model was 58.508317708969116 seconds

evaluation in 10.397024869918823 seconds

Loss: 0.8073

Train Accuracy: 71.36%

Test Accuracy: 72.62%

Google Drive already mounted.

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

--- Training Member 2 (Batch size: 256) ---
built data in 1.6840169429779053 seconds
LR changed during epoch: 5.45e-04 -> 5.31e-04
total runtime to train this model was 53.70632982254028 seconds
evaluation in 10.393189907073975 seconds

Loss: 0.6326

Train Accuracy: 77.73%

Test Accuracy: 77.99%

Google Drive already mounted.

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

--- Training Member 3 (Batch size: 256) ---
built data in 1.8275225162506104 seconds
LR changed during epoch: 4.07e-04 -> 4.07e-04
total runtime to train this model was 54.09108328819275 seconds
evaluation in 10.36344861984253 seconds

Loss: 0.6270

Train Accuracy: 78.17%

Test Accuracy: 76.27%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---
built data in 1.6774225234985352 seconds
LR changed during epoch: 9.82e-05 -> 9.68e-05
total runtime to train this model was 72.30647730827332 seconds
evaluation in 10.33742618560791 seconds

Loss: 0.6451

Train Accuracy: 77.41%

Test Accuracy: 76.69%

Google Drive already mounted.

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

=====

Epoch 23 Summary:

=====

Time: 375.89s (Avg member: 75.18s)

Population Mean Accuracy: 75.37%

Best Member Accuracy: 77.99%

Mean Batch Size: 154

Mean Learning Rate: 9.22e-04

Mean Weight Decay: 0.200

=====

Epoch 24/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.6425461769104004 seconds

LR changed during epoch: 4.64e-04 -> 4.49e-04

total runtime to train this model was 72.31731534004211 seconds

evaluation in 10.395411729812622 seconds

Loss: 0.6628

Train Accuracy: 76.70%

Test Accuracy: 76.86%

Google Drive already mounted.

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

--- Training Member 1 (Batch size: 128) ---

built data in 1.7018628120422363 seconds

LR changed during epoch: 2.64e-03 -> 2.60e-03

total runtime to train this model was 58.52087187767029 seconds

evaluation in 10.32055950164795 seconds

Loss: 0.7931

Train Accuracy: 72.06%

Test Accuracy: 73.47%

Google Drive already mounted.

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

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

built data in 1.6497161388397217 seconds

LR changed during epoch: 5.31e-04 -> 5.16e-04

total runtime to train this model was 53.80524182319641 seconds

evaluation in 10.326235055923462 seconds

Loss: 0.6157

Train Accuracy: 78.35%

Test Accuracy: 77.01%

Google Drive already mounted.

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

--- Training Member 3 (Batch size: 256) ---
built data in 1.6029391288757324 seconds
LR changed during epoch: 4.07e-04 -> 4.06e-04
total runtime to train this model was 53.91480803489685 seconds
evaluation in 10.42005968093872 seconds
Loss: 0.5997
Train Accuracy: 78.87%
Test Accuracy: 77.80%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.7858192920684814 seconds
LR changed during epoch: 9.68e-05 -> 9.52e-05
total runtime to train this model was 72.111398935318 seconds
evaluation in 10.42053484916687 seconds
Loss: 0.6183
Train Accuracy: 78.10%
Test Accuracy: 77.65%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 24 Summary:

=====

Time: 376.64s (Avg member: 75.33s)
Population Mean Accuracy: 76.56%
Best Member Accuracy: 77.80%
Mean Batch Size: 154
Mean Learning Rate: 9.22e-04
Mean Weight Decay: 0.200

=====

Epoch 25/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.8531379699707031 seconds
LR changed during epoch: 4.49e-04 -> 4.34e-04
total runtime to train this model was 72.17814898490906 seconds
evaluation in 10.389646053314209 seconds

Loss: 0.6434
Train Accuracy: 77.41%
Test Accuracy: 77.34%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6420292854309082 seconds
LR changed during epoch: 2.60e-03 -> 2.56e-03
total runtime to train this model was 58.58780646324158 seconds
evaluation in 10.356857538223267 seconds

Loss: 0.7721
Train Accuracy: 72.85%
Test Accuracy: 71.18%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6712219715118408 seconds
LR changed during epoch: 5.16e-04 -> 5.01e-04
total runtime to train this model was 53.866705656051636 seconds
evaluation in 10.535059928894043 seconds

Loss: 0.5926
Train Accuracy: 79.27%
Test Accuracy: 78.22%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.770979881286621 seconds
LR changed during epoch: 4.06e-04 -> 4.04e-04
total runtime to train this model was 54.13918113708496 seconds
evaluation in 10.35592532157898 seconds

Loss: 0.5770
Train Accuracy: 79.67%
Test Accuracy: 78.17%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---

built data in 1.6838936805725098 seconds
LR changed during epoch: 9.52e-05 -> 9.34e-05
total runtime to train this model was 72.33691811561584 seconds
evaluation in 10.41535758972168 seconds

Loss: 0.5949
Train Accuracy: 79.11%
Test Accuracy: 77.18%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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

==== PBT Exploit & Explore ===

Top performers: [78.22]
Bottom performers: [71.18]
Member 1: LR changed from 2.86e-03 to 1.22e-03
Member 1 copied from 2
LR=1.22e-03, WD=0.119, DropPath=0.234, Warmup=5 epochs, Batch=64

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

Time: 376.93s (Avg member: 75.38s)
Population Mean Accuracy: 76.42%
Best Member Accuracy: 78.22%
Mean Batch Size: 141
Mean Learning Rate: 5.95e-04
Mean Weight Decay: 0.202

=====
Epoch 26/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.685884952545166 seconds
LR changed during epoch: 4.34e-04 -> 4.17e-04
total runtime to train this model was 72.5379741191864 seconds
evaluation in 10.63398814201355 seconds
Loss: 0.6377
Train Accuracy: 77.67%
Test Accuracy: 77.30%
Google Drive already mounted.

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

--- Training Member 1 (Batch size: 64) ---

built data in 1.6544487476348877 seconds

LR changed during epoch: 3.13e-07 -> 2.45e-04

total runtime to train this model was 72.66814541816711 seconds

evaluation in 10.543000936508179 seconds

Loss: 0.5281

Train Accuracy: 81.34%

Test Accuracy: 76.70%

Google Drive already mounted.

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

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

built data in 1.832822322845459 seconds

LR changed during epoch: 5.01e-04 -> 4.84e-04

total runtime to train this model was 53.94161558151245 seconds

evaluation in 10.296313762664795 seconds

Loss: 0.5703

Train Accuracy: 79.86%

Test Accuracy: 78.53%

Google Drive already mounted.

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

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

built data in 1.6964056491851807 seconds

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

total runtime to train this model was 53.98019289970398 seconds

evaluation in 10.331356763839722 seconds

Loss: 0.5553

Train Accuracy: 80.56%

Test Accuracy: 77.95%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6600074768066406 seconds

LR changed during epoch: 9.34e-05 -> 9.14e-05

total runtime to train this model was 72.10709023475647 seconds

evaluation in 10.357398509979248 seconds

Loss: 0.5733
Train Accuracy: 79.70%
Test Accuracy: 78.35%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 26 Summary:
=====

Time: 390.93s (Avg member: 78.19s)
Population Mean Accuracy: 77.77%
Best Member Accuracy: 78.53%
Mean Batch Size: 141
Mean Learning Rate: 5.95e-04
Mean Weight Decay: 0.202

=====

Epoch 27/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6183264255523682 seconds
LR changed during epoch: 4.17e-04 -> 4.01e-04
total runtime to train this model was 72.20156240463257 seconds
evaluation in 10.345309019088745 seconds

Loss: 0.6170
Train Accuracy: 78.39%
Test Accuracy: 76.50%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 64) ---
built data in 1.6622505187988281 seconds
LR changed during epoch: 2.45e-04 -> 4.90e-04
total runtime to train this model was 71.13092112541199 seconds
evaluation in 10.3376784324646 seconds

Loss: 0.6841
Train Accuracy: 75.72%
Test Accuracy: 73.76%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.711775541305542 seconds
LR changed during epoch: 4.84e-04 -> 4.67e-04
total runtime to train this model was 53.68374252319336 seconds
evaluation in 10.395671606063843 seconds
Loss: 0.5493
Train Accuracy: 80.66%
Test Accuracy: 78.26%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8231799602508545 seconds
LR changed during epoch: 4.02e-04 -> 4.00e-04
total runtime to train this model was 53.85145616531372 seconds
evaluation in 10.419268369674683 seconds
Loss: 0.5413
Train Accuracy: 80.93%
Test Accuracy: 79.20%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6415505409240723 seconds
LR changed during epoch: 9.14e-05 -> 8.93e-05
total runtime to train this model was 71.77839875221252 seconds
evaluation in 10.369269609451294 seconds
Loss: 0.5594
Train Accuracy: 80.37%
Test Accuracy: 79.18%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 27 Summary:

=====

Time: 387.68s (Avg member: 77.53s)
Population Mean Accuracy: 77.38%
Best Member Accuracy: 79.20%
Mean Batch Size: 141

Mean Learning Rate: 5.95e-04
Mean Weight Decay: 0.202

=====
Epoch 28/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6398468017578125 seconds
LR changed during epoch: 4.01e-04 -> 3.84e-04
total runtime to train this model was 71.8689181804657 seconds
evaluation in 10.350802421569824 seconds
Loss: 0.6025
Train Accuracy: 78.92%
Test Accuracy: 77.63%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 64) ---
built data in 1.647447109222412 seconds
LR changed during epoch: 4.90e-04 -> 7.35e-04
total runtime to train this model was 72.06466603279114 seconds
evaluation in 10.320355415344238 seconds
Loss: 0.8077
Train Accuracy: 71.36%
Test Accuracy: 70.10%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6569747924804688 seconds
LR changed during epoch: 4.67e-04 -> 4.50e-04
total runtime to train this model was 53.778013706207275 seconds
evaluation in 10.36973237991333 seconds
Loss: 0.5357
Train Accuracy: 80.95%
Test Accuracy: 79.77%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

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

built data in 1.670534372329712 seconds
LR changed during epoch: 4.00e-04 -> 3.96e-04
total runtime to train this model was 53.9031457901001 seconds
evaluation in 10.421366214752197 seconds
Loss: 0.5240
Train Accuracy: 81.54%
Test Accuracy: 79.38%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.8045525550842285 seconds
LR changed during epoch: 8.93e-05 -> 8.70e-05
total runtime to train this model was 71.97961330413818 seconds
evaluation in 10.380720138549805 seconds
Loss: 0.5330
Train Accuracy: 81.23%
Test Accuracy: 79.23%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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

Time: 388.64s (Avg member: 77.73s)
Population Mean Accuracy: 77.22%
Best Member Accuracy: 79.77%
Mean Batch Size: 141
Mean Learning Rate: 5.95e-04
Mean Weight Decay: 0.202

=====
Epoch 29/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.8003566265106201 seconds
LR changed during epoch: 3.84e-04 -> 3.67e-04
total runtime to train this model was 71.96633791923523 seconds
evaluation in 10.335238218307495 seconds
Loss: 0.5984
Train Accuracy: 79.01%

Test Accuracy: 77.83%

Google Drive already mounted.

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

--- Training Member 1 (Batch size: 64) ---

built data in 1.624373435974121 seconds

LR changed during epoch: 7.35e-04 -> 9.80e-04

total runtime to train this model was 71.73758482933044 seconds

evaluation in 10.318236589431763 seconds

Loss: 0.8767

Train Accuracy: 69.00%

Test Accuracy: 70.02%

Google Drive already mounted.

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

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

built data in 1.649618148803711 seconds

LR changed during epoch: 4.50e-04 -> 4.32e-04

total runtime to train this model was 53.588844537734985 seconds

evaluation in 10.556913137435913 seconds

Loss: 0.5121

Train Accuracy: 81.82%

Test Accuracy: 80.12%

Google Drive already mounted.

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

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

built data in 1.8235905170440674 seconds

LR changed during epoch: 3.96e-04 -> 3.92e-04

total runtime to train this model was 54.02439332008362 seconds

evaluation in 10.405335426330566 seconds

Loss: 0.5078

Train Accuracy: 82.06%

Test Accuracy: 79.65%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6546955108642578 seconds

LR changed during epoch: 8.70e-05 -> 8.46e-05

total runtime to train this model was 71.9883439540863 seconds
evaluation in 10.366765022277832 seconds

Loss: 0.5210

Train Accuracy: 81.63%

Test Accuracy: 79.09%

Google Drive already mounted.

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

=====

Epoch 29 Summary:

=====

Time: 388.34s (Avg member: 77.67s)

Population Mean Accuracy: 77.34%

Best Member Accuracy: 80.12%

Mean Batch Size: 141

Mean Learning Rate: 5.95e-04

Mean Weight Decay: 0.202

=====

Epoch 30/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.6597959995269775 seconds

LR changed during epoch: 3.67e-04 -> 3.50e-04

total runtime to train this model was 71.89074730873108 seconds

evaluation in 10.32968783378601 seconds

Loss: 0.5881

Train Accuracy: 79.54%

Test Accuracy: 76.59%

Google Drive already mounted.

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

--- Training Member 1 (Batch size: 64) ---

built data in 1.645287275314331 seconds

LR changed during epoch: 9.80e-04 -> 1.22e-03

total runtime to train this model was 71.07377171516418 seconds

evaluation in 10.342602491378784 seconds

Loss: 0.9113

Train Accuracy: 67.73%

Test Accuracy: 67.90%

Google Drive already mounted.

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

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

built data in 1.5977725982666016 seconds

LR changed during epoch: 4.32e-04 -> 4.13e-04

total runtime to train this model was 53.63576412200928 seconds

evaluation in 10.410841941833496 seconds

Loss: 0.4836

Train Accuracy: 83.02%

Test Accuracy: 80.13%

Google Drive already mounted.

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

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

built data in 1.6749458312988281 seconds

LR changed during epoch: 3.92e-04 -> 3.88e-04

total runtime to train this model was 53.83024597167969 seconds

evaluation in 10.47500467300415 seconds

Loss: 0.4919

Train Accuracy: 82.75%

Test Accuracy: 79.67%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.7986502647399902 seconds

LR changed during epoch: 8.46e-05 -> 8.21e-05

total runtime to train this model was 71.77736306190491 seconds

evaluation in 10.38262414932251 seconds

Loss: 0.5025

Train Accuracy: 82.33%

Test Accuracy: 79.65%

Google Drive already mounted.

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

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

==== PBT Exploit & Explore ===

Top performers: [80.13]

Bottom performers: [67.9]

Member 1: LR changed from 1.22e-03 to 3.21e-03
Member 1 copied from 2
LR=3.21e-03, WD=0.169, DropPath=0.270, Warmup=4 epochs, Batch=128

=====

Epoch 30 Summary:

=====

Time: 387.44s (Avg member: 77.49s)
Population Mean Accuracy: 76.79%
Best Member Accuracy: 80.13%
Mean Batch Size: 154
Mean Learning Rate: 9.93e-04
Mean Weight Decay: 0.212

=====

Epoch 31/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.7977983951568604 seconds
LR changed during epoch: 3.50e-04 -> 3.33e-04
total runtime to train this model was 71.88525176048279 seconds
evaluation in 10.336451768875122 seconds

Loss: 0.5671
Train Accuracy: 79.98%
Test Accuracy: 78.83%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6530663967132568 seconds
LR changed during epoch: 2.06e-06 -> 8.06e-04
total runtime to train this model was 58.432536363601685 seconds
evaluation in 10.38686752319336 seconds

Loss: 0.5465
Train Accuracy: 80.65%
Test Accuracy: 73.04%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6532163619995117 seconds

LR changed during epoch: 4.13e-04 -> 3.94e-04
total runtime to train this model was 53.65471363067627 seconds
evaluation in 10.670971632003784 seconds
Loss: 0.4655
Train Accuracy: 83.59%
Test Accuracy: 80.78%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8321912288665771 seconds
LR changed during epoch: 3.88e-04 -> 3.83e-04
total runtime to train this model was 54.01422643661499 seconds
evaluation in 10.41868782043457 seconds
Loss: 0.4771
Train Accuracy: 83.09%
Test Accuracy: 80.43%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6446533203125 seconds
LR changed during epoch: 8.21e-05 -> 7.94e-05
total runtime to train this model was 71.81489658355713 seconds
evaluation in 10.422675132751465 seconds
Loss: 0.4813
Train Accuracy: 83.18%
Test Accuracy: 80.71%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 31 Summary:

=====

Time: 375.52s (Avg member: 75.10s)
Population Mean Accuracy: 78.76%
Best Member Accuracy: 80.78%
Mean Batch Size: 154
Mean Learning Rate: 9.93e-04
Mean Weight Decay: 0.212

```
=====
Epoch 32/60
=====
```

--- Training Member 0 (Batch size: 64) ---
built data in 1.6354267597198486 seconds
LR changed during epoch: 3.33e-04 -> 3.15e-04
total runtime to train this model was 71.72714948654175 seconds
evaluation in 10.383002519607544 seconds

Loss: 0.5539
Train Accuracy: 80.53%
Test Accuracy: 78.97%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6789984703063965 seconds
LR changed during epoch: 8.06e-04 -> 1.61e-03
total runtime to train this model was 58.49156975746155 seconds
evaluation in 10.355245351791382 seconds
Loss: 0.8444
Train Accuracy: 70.32%
Test Accuracy: 66.61%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6213271617889404 seconds
LR changed during epoch: 3.94e-04 -> 3.75e-04
total runtime to train this model was 53.62684965133667 seconds
evaluation in 10.41059684753418 seconds
Loss: 0.4494
Train Accuracy: 84.14%
Test Accuracy: 81.53%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.640350103378296 seconds
LR changed during epoch: 3.83e-04 -> 3.78e-04
total runtime to train this model was 53.76235628128052 seconds

evaluation in 10.609053134918213 seconds

Loss: 0.4578

Train Accuracy: 83.72%

Test Accuracy: 80.61%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.8097035884857178 seconds

LR changed during epoch: 7.94e-05 -> 7.66e-05

total runtime to train this model was 71.81406474113464 seconds

evaluation in 10.343686819076538 seconds

Loss: 0.4641

Train Accuracy: 83.64%

Test Accuracy: 81.16%

Google Drive already mounted.

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

=====

Epoch 32 Summary:

=====

Time: 374.75s (Avg member: 74.95s)

Population Mean Accuracy: 77.78%

Best Member Accuracy: 81.53%

Mean Batch Size: 154

Mean Learning Rate: 9.93e-04

Mean Weight Decay: 0.212

=====

Epoch 33/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.7240867614746094 seconds

LR changed during epoch: 3.15e-04 -> 2.98e-04

total runtime to train this model was 71.86848402023315 seconds

evaluation in 10.309493780136108 seconds

Loss: 0.5417

Train Accuracy: 80.94%

Test Accuracy: 79.35%

Google Drive already mounted.

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

--- Training Member 1 (Batch size: 128) ---

built data in 1.6886556148529053 seconds

LR changed during epoch: 1.61e-03 -> 2.41e-03

total runtime to train this model was 58.469207525253296 seconds

evaluation in 10.349605083465576 seconds

Loss: 0.9791

Train Accuracy: 65.31%

Test Accuracy: 66.63%

Google Drive already mounted.

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

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

built data in 1.6470253467559814 seconds

LR changed during epoch: 3.75e-04 -> 3.55e-04

total runtime to train this model was 53.66715383529663 seconds

evaluation in 10.489259719848633 seconds

Loss: 0.4267

Train Accuracy: 84.73%

Test Accuracy: 81.44%

Google Drive already mounted.

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

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

built data in 1.64963698387146 seconds

LR changed during epoch: 3.78e-04 -> 3.72e-04

total runtime to train this model was 54.07657265663147 seconds

evaluation in 10.415027856826782 seconds

Loss: 0.4449

Train Accuracy: 84.37%

Test Accuracy: 80.75%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6600582599639893 seconds

LR changed during epoch: 7.66e-05 -> 7.38e-05

total runtime to train this model was 71.34992361068726 seconds

evaluation in 10.350426435470581 seconds

Loss: 0.4457
Train Accuracy: 84.33%
Test Accuracy: 80.54%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 33 Summary:
=====

Time: 374.68s (Avg member: 74.94s)
Population Mean Accuracy: 77.74%
Best Member Accuracy: 81.44%
Mean Batch Size: 154
Mean Learning Rate: 9.93e-04
Mean Weight Decay: 0.212

=====

Epoch 34/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6255533695220947 seconds
LR changed during epoch: 2.98e-04 -> 2.80e-04
total runtime to train this model was 71.71732687950134 seconds
evaluation in 10.399329900741577 seconds

Loss: 0.5292
Train Accuracy: 81.38%
Test Accuracy: 78.06%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.6590769290924072 seconds
LR changed during epoch: 2.41e-03 -> 3.21e-03
total runtime to train this model was 58.47062110900879 seconds
evaluation in 10.342368125915527 seconds

Loss: 1.0012
Train Accuracy: 64.56%
Test Accuracy: 64.20%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.678459644317627 seconds
LR changed during epoch: 3.55e-04 -> 3.35e-04
total runtime to train this model was 53.647075176239014 seconds
evaluation in 10.447409868240356 seconds
Loss: 0.3989
Train Accuracy: 85.96%
Test Accuracy: 82.11%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.711519718170166 seconds
LR changed during epoch: 3.72e-04 -> 3.66e-04
total runtime to train this model was 53.897844552993774 seconds
evaluation in 10.623876571655273 seconds
Loss: 0.4237
Train Accuracy: 84.77%
Test Accuracy: 80.14%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6715686321258545 seconds
LR changed during epoch: 7.38e-05 -> 7.08e-05
total runtime to train this model was 72.01859474182129 seconds
evaluation in 10.427814483642578 seconds
Loss: 0.4250
Train Accuracy: 85.03%
Test Accuracy: 81.11%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 34 Summary:

=====

Time: 374.94s (Avg member: 74.99s)
Population Mean Accuracy: 77.12%
Best Member Accuracy: 82.11%
Mean Batch Size: 154

Mean Learning Rate: 9.93e-04
Mean Weight Decay: 0.212

=====
Epoch 35/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.7404890060424805 seconds
LR changed during epoch: 2.80e-04 -> 2.63e-04
total runtime to train this model was 72.80282640457153 seconds
evaluation in 10.571429252624512 seconds
Loss: 0.5138
Train Accuracy: 82.08%
Test Accuracy: 80.45%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 128) ---
built data in 1.8300793170928955 seconds
LR changed during epoch: 3.21e-03 -> 3.21e-03
total runtime to train this model was 58.51948547363281 seconds
evaluation in 10.348276376724243 seconds
Loss: 0.9885
Train Accuracy: 65.14%
Test Accuracy: 68.16%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.8123388290405273 seconds
LR changed during epoch: 3.35e-04 -> 3.16e-04
total runtime to train this model was 53.8367235660553 seconds
evaluation in 10.419372797012329 seconds
Loss: 0.3844
Train Accuracy: 86.25%
Test Accuracy: 82.30%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

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

built data in 1.5951590538024902 seconds
LR changed during epoch: 3.66e-04 -> 3.59e-04
total runtime to train this model was 53.81539797782898 seconds
evaluation in 10.42150330543518 seconds
Loss: 0.4121
Train Accuracy: 85.36%
Test Accuracy: 80.98%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.647545576095581 seconds
LR changed during epoch: 7.08e-05 -> 6.78e-05
total runtime to train this model was 71.92098927497864 seconds
evaluation in 10.337245225906372 seconds
Loss: 0.4131
Train Accuracy: 85.24%
Test Accuracy: 81.44%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

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

==== PBT Exploit & Explore ====
Top performers: [82.3]
Bottom performers: [68.16]
Member 1: LR changed from 3.21e-03 to 5.00e-03
Member 1 copied from 2
LR=5.00e-03, WD=0.138, DropPath=0.287, Warmup=5 epochs, Batch=256

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

Time: 376.83s (Avg member: 75.36s)
Population Mean Accuracy: 78.67%
Best Member Accuracy: 82.30%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.206

=====

Epoch 36/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6648807525634766 seconds
LR changed during epoch: 2.63e-04 -> 2.46e-04
total runtime to train this model was 71.51592898368835 seconds
evaluation in 10.38386058807373 seconds
Loss: 0.5009
Train Accuracy: 82.51%
Test Accuracy: 80.21%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7505300045013428 seconds
LR changed during epoch: 5.10e-06 -> 1.01e-03
total runtime to train this model was 53.833930015563965 seconds
evaluation in 10.456095695495605 seconds
Loss: 0.4410
Train Accuracy: 84.38%
Test Accuracy: 76.17%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.723832130432129 seconds
LR changed during epoch: 3.16e-04 -> 2.96e-04
total runtime to train this model was 53.804457902908325 seconds
evaluation in 10.625845432281494 seconds
Loss: 0.3676
Train Accuracy: 86.93%
Test Accuracy: 82.09%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.718242883682251 seconds
LR changed during epoch: 3.59e-04 -> 3.51e-04
total runtime to train this model was 54.14316964149475 seconds
evaluation in 10.409455299377441 seconds

Loss: 0.3914
Train Accuracy: 86.06%
Test Accuracy: 81.93%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6900696754455566 seconds
LR changed during epoch: 6.78e-05 -> 6.47e-05
total runtime to train this model was 71.87933015823364 seconds
evaluation in 10.32890796661377 seconds

Loss: 0.3928
Train Accuracy: 86.12%
Test Accuracy: 81.43%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 36 Summary:

=====

Time: 370.65s (Avg member: 74.13s)
Population Mean Accuracy: 80.37%
Best Member Accuracy: 82.09%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.206

=====

Epoch 37/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6962354183197021 seconds
LR changed during epoch: 2.46e-04 -> 2.29e-04
total runtime to train this model was 71.77614235877991 seconds
evaluation in 10.34857177734375 seconds

Loss: 0.4876
Train Accuracy: 82.95%
Test Accuracy: 80.88%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6849486827850342 seconds
LR changed during epoch: 1.01e-03 -> 2.01e-03
total runtime to train this model was 53.73182225227356 seconds
evaluation in 10.375337839126587 seconds
Loss: 0.7407
Train Accuracy: 73.86%
Test Accuracy: 64.65%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.68363356590271 seconds
LR changed during epoch: 2.96e-04 -> 2.76e-04
total runtime to train this model was 53.70570778846741 seconds
evaluation in 10.64487099647522 seconds
Loss: 0.3411
Train Accuracy: 87.94%
Test Accuracy: 82.51%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8449485301971436 seconds
LR changed during epoch: 3.51e-04 -> 3.44e-04
total runtime to train this model was 54.04917097091675 seconds
evaluation in 10.451587915420532 seconds
Loss: 0.3775
Train Accuracy: 86.70%
Test Accuracy: 81.64%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6729323863983154 seconds
LR changed during epoch: 6.47e-05 -> 6.16e-05
total runtime to train this model was 71.91024804115295 seconds
evaluation in 10.358553886413574 seconds
Loss: 0.3764
Train Accuracy: 86.63%

Test Accuracy: 82.27%

Google Drive already mounted.

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

=====

Epoch 37 Summary:

=====

Time: 370.55s (Avg member: 74.11s)

Population Mean Accuracy: 78.39%

Best Member Accuracy: 82.51%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.206

=====

Epoch 38/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.7069721221923828 seconds

LR changed during epoch: 2.29e-04 -> 2.12e-04

total runtime to train this model was 71.9120306968689 seconds

evaluation in 10.306579351425171 seconds

Loss: 0.4739

Train Accuracy: 83.46%

Test Accuracy: 80.48%

Google Drive already mounted.

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

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

built data in 1.5943262577056885 seconds

LR changed during epoch: 2.01e-03 -> 3.01e-03

total runtime to train this model was 53.67133450508118 seconds

evaluation in 10.383748531341553 seconds

Loss: 0.8938

Train Accuracy: 68.45%

Test Accuracy: 67.75%

Google Drive already mounted.

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

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

built data in 1.669668436050415 seconds
LR changed during epoch: 2.76e-04 -> 2.57e-04
total runtime to train this model was 53.61445069313049 seconds
evaluation in 10.544362545013428 seconds
Loss: 0.3159
Train Accuracy: 88.71%
Test Accuracy: 82.61%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8287816047668457 seconds
LR changed during epoch: 3.44e-04 -> 3.35e-04
total runtime to train this model was 54.0101580619812 seconds
evaluation in 10.403053522109985 seconds
Loss: 0.3632
Train Accuracy: 87.04%
Test Accuracy: 81.66%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.59462308883667 seconds
LR changed during epoch: 6.16e-05 -> 5.85e-05
total runtime to train this model was 71.80724573135376 seconds
evaluation in 10.398420095443726 seconds
Loss: 0.3646
Train Accuracy: 87.08%
Test Accuracy: 81.45%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 38 Summary:

=====

Time: 370.07s (Avg member: 74.01s)
Population Mean Accuracy: 78.79%
Best Member Accuracy: 82.61%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.206

```
=====
Epoch 39/60
=====
```

--- Training Member 0 (Batch size: 64) ---
built data in 1.641026258468628 seconds
LR changed during epoch: 2.12e-04 -> 1.96e-04
total runtime to train this model was 71.77762150764465 seconds
evaluation in 10.359864950180054 seconds
Loss: 0.4542
Train Accuracy: 84.16%
Test Accuracy: 80.90%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6912431716918945 seconds
LR changed during epoch: 3.01e-03 -> 4.01e-03
total runtime to train this model was 53.75004601478577 seconds
evaluation in 10.384557723999023 seconds
Loss: 0.9176
Train Accuracy: 67.68%
Test Accuracy: 69.15%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6515660285949707 seconds
LR changed during epoch: 2.57e-04 -> 2.37e-04
total runtime to train this model was 53.655234575271606 seconds
evaluation in 10.547420740127563 seconds
Loss: 0.3007
Train Accuracy: 89.39%
Test Accuracy: 82.76%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8432292938232422 seconds
LR changed during epoch: 3.35e-04 -> 3.27e-04

total runtime to train this model was 54.05187773704529 seconds
evaluation in 10.402078628540039 seconds

Loss: 0.3489

Train Accuracy: 87.62%

Test Accuracy: 82.52%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6656038761138916 seconds

LR changed during epoch: 5.85e-05 -> 5.53e-05

total runtime to train this model was 72.01058864593506 seconds
evaluation in 10.569379091262817 seconds

Loss: 0.3414

Train Accuracy: 87.94%

Test Accuracy: 82.62%

Google Drive already mounted.

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

=====

Epoch 39 Summary:

=====

Time: 370.82s (Avg member: 74.16s)

Population Mean Accuracy: 79.59%

Best Member Accuracy: 82.76%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.206

=====

Epoch 40/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.5794029235839844 seconds

LR changed during epoch: 1.96e-04 -> 1.80e-04

total runtime to train this model was 72.01841950416565 seconds
evaluation in 10.3450186252594 seconds

Loss: 0.4434

Train Accuracy: 84.36%

Test Accuracy: 80.79%

Google Drive already mounted.

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

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

built data in 1.7174644470214844 seconds

LR changed during epoch: 4.01e-03 -> 5.00e-03

total runtime to train this model was 53.72876214981079 seconds

evaluation in 10.332286357879639 seconds

Loss: 0.9216

Train Accuracy: 67.38%

Test Accuracy: 63.60%

Google Drive already mounted.

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

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

built data in 1.6511318683624268 seconds

LR changed during epoch: 2.37e-04 -> 2.18e-04

total runtime to train this model was 53.60851740837097 seconds

evaluation in 10.460610151290894 seconds

Loss: 0.2807

Train Accuracy: 90.06%

Test Accuracy: 83.61%

Google Drive already mounted.

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

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

built data in 1.685208797454834 seconds

LR changed during epoch: 3.27e-04 -> 3.18e-04

total runtime to train this model was 53.86518430709839 seconds

evaluation in 10.451118230819702 seconds

Loss: 0.3336

Train Accuracy: 88.18%

Test Accuracy: 82.53%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.7134335041046143 seconds

LR changed during epoch: 5.53e-05 -> 5.21e-05

total runtime to train this model was 72.41082501411438 seconds

evaluation in 10.511075258255005 seconds

Loss: 0.3295

Train Accuracy: 88.29%

Test Accuracy: 82.51%

Google Drive already mounted.

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

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

==== PBT Exploit & Explore ===

Top performers: [83.61]

Bottom performers: [63.6]

Member 1 copied from 2

LR=5.00e-03, WD=0.125, DropPath=0.260, Warmup=7 epochs, Batch=256

=====

Epoch 40 Summary:

=====

Time: 371.03s (Avg member: 74.20s)

Population Mean Accuracy: 78.61%

Best Member Accuracy: 83.61%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.203

=====

Epoch 41/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.823181390762329 seconds

LR changed during epoch: 1.80e-04 -> 1.64e-04

total runtime to train this model was 72.42017078399658 seconds

evaluation in 10.377059698104858 seconds

Loss: 0.4264

Train Accuracy: 85.02%

Test Accuracy: 82.13%

Google Drive already mounted.

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

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

built data in 1.7553200721740723 seconds

LR changed during epoch: 3.64e-06 -> 7.18e-04

total runtime to train this model was 54.273845195770264 seconds
evaluation in 10.728569269180298 seconds

Loss: 0.3285

Train Accuracy: 88.42%

Test Accuracy: 80.57%

Google Drive already mounted.

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

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

built data in 1.7134246826171875 seconds

LR changed during epoch: 2.18e-04 -> 2.00e-04

total runtime to train this model was 54.0248236656189 seconds

evaluation in 10.415444135665894 seconds

Loss: 0.2633

Train Accuracy: 90.60%

Test Accuracy: 84.00%

Google Drive already mounted.

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

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

built data in 1.623347282409668 seconds

LR changed during epoch: 3.18e-04 -> 3.09e-04

total runtime to train this model was 53.850337982177734 seconds

evaluation in 10.43201208114624 seconds

Loss: 0.3139

Train Accuracy: 88.87%

Test Accuracy: 81.41%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.5906965732574463 seconds

LR changed during epoch: 5.21e-05 -> 4.88e-05

total runtime to train this model was 71.79825830459595 seconds

evaluation in 10.368438243865967 seconds

Loss: 0.3168

Train Accuracy: 88.88%

Test Accuracy: 82.78%

Google Drive already mounted.

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

```
=====
Epoch 41 Summary:
=====
```

Time: 371.81s (Avg member: 74.36s)
Population Mean Accuracy: 82.18%
Best Member Accuracy: 84.00%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.203

```
=====
Epoch 42/60
=====
```

--- Training Member 0 (Batch size: 64) ---
built data in 1.6501541137695312 seconds
LR changed during epoch: 1.64e-04 -> 1.49e-04
total runtime to train this model was 71.45025992393494 seconds
evaluation in 10.333920955657959 seconds
Loss: 0.4099
Train Accuracy: 85.66%
Test Accuracy: 82.01%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6683456897735596 seconds
LR changed during epoch: 7.18e-04 -> 1.43e-03
total runtime to train this model was 53.72067379951477 seconds
evaluation in 10.409576416015625 seconds
Loss: 0.6038
Train Accuracy: 78.49%
Test Accuracy: 76.32%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7955820560455322 seconds
LR changed during epoch: 2.00e-04 -> 1.82e-04
total runtime to train this model was 53.70677065849304 seconds
evaluation in 10.590213537216187 seconds

Loss: 0.2339
Train Accuracy: 91.73%
Test Accuracy: 83.78%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6754419803619385 seconds
LR changed during epoch: 3.09e-04 -> 2.99e-04
total runtime to train this model was 53.95271825790405 seconds
evaluation in 10.470165252685547 seconds
Loss: 0.3015
Train Accuracy: 89.30%
Test Accuracy: 82.69%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6623377799987793 seconds
LR changed during epoch: 4.88e-05 -> 4.57e-05
total runtime to train this model was 71.85480618476868 seconds
evaluation in 10.359278440475464 seconds
Loss: 0.2981
Train Accuracy: 89.44%
Test Accuracy: 82.64%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 42 Summary:

=====

Time: 370.04s (Avg member: 74.01s)
Population Mean Accuracy: 81.49%
Best Member Accuracy: 83.78%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.203

=====

Epoch 43/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6812381744384766 seconds
LR changed during epoch: 1.49e-04 -> 1.34e-04
total runtime to train this model was 72.0343656539917 seconds
evaluation in 10.371864080429077 seconds
Loss: 0.3961
Train Accuracy: 86.15%
Test Accuracy: 82.28%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.594635248184204 seconds
LR changed during epoch: 1.43e-03 -> 2.15e-03
total runtime to train this model was 53.72319722175598 seconds
evaluation in 10.39603304862976 seconds
Loss: 0.7598
Train Accuracy: 73.08%
Test Accuracy: 72.30%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6930170059204102 seconds
LR changed during epoch: 1.82e-04 -> 1.64e-04
total runtime to train this model was 53.662214279174805 seconds
evaluation in 10.550468921661377 seconds
Loss: 0.2188
Train Accuracy: 92.18%
Test Accuracy: 84.10%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8091137409210205 seconds
LR changed during epoch: 2.99e-04 -> 2.89e-04
total runtime to train this model was 53.9970920085907 seconds
evaluation in 10.438925981521606 seconds
Loss: 0.2846
Train Accuracy: 89.93%

Test Accuracy: 82.67%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.7323527336120605 seconds
LR changed during epoch: 4.57e-05 -> 4.25e-05
total runtime to train this model was 72.95249772071838 seconds
evaluation in 10.360869646072388 seconds

Loss: 0.2816
Train Accuracy: 90.00%
Test Accuracy: 83.29%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 43 Summary:

=====

Time: 371.80s (Avg member: 74.36s)
Population Mean Accuracy: 80.93%
Best Member Accuracy: 84.10%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.203

=====

Epoch 44/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6281323432922363 seconds
LR changed during epoch: 1.34e-04 -> 1.20e-04
total runtime to train this model was 71.74028730392456 seconds
evaluation in 10.333608865737915 seconds

Loss: 0.3805
Train Accuracy: 86.57%
Test Accuracy: 81.84%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

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

built data in 1.687574863433838 seconds
LR changed during epoch: 2.15e-03 -> 2.86e-03
total runtime to train this model was 53.613542318344116 seconds
evaluation in 10.38183331489563 seconds
Loss: 0.8172
Train Accuracy: 71.21%
Test Accuracy: 64.89%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6535389423370361 seconds
LR changed during epoch: 1.64e-04 -> 1.47e-04
total runtime to train this model was 53.50745368003845 seconds
evaluation in 10.607450485229492 seconds
Loss: 0.1992
Train Accuracy: 92.94%
Test Accuracy: 84.42%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.8555669784545898 seconds
LR changed during epoch: 2.89e-04 -> 2.79e-04
total runtime to train this model was 54.08684158325195 seconds
evaluation in 10.434637784957886 seconds
Loss: 0.2742
Train Accuracy: 90.08%
Test Accuracy: 82.03%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6499803066253662 seconds
LR changed during epoch: 4.25e-05 -> 3.94e-05
total runtime to train this model was 71.68671894073486 seconds
evaluation in 10.370630264282227 seconds
Loss: 0.2666
Train Accuracy: 90.43%
Test Accuracy: 83.47%
Google Drive already mounted.

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

=====

Epoch 44 Summary:

=====

Time: 369.89s (Avg member: 73.98s)

Population Mean Accuracy: 79.33%

Best Member Accuracy: 84.42%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.203

=====

Epoch 45/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.6461453437805176 seconds

LR changed during epoch: 1.20e-04 -> 1.06e-04

total runtime to train this model was 72.16991424560547 seconds

evaluation in 10.35183596611023 seconds

Loss: 0.3632

Train Accuracy: 87.21%

Test Accuracy: 82.42%

Google Drive already mounted.

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

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

built data in 1.5806865692138672 seconds

LR changed during epoch: 2.86e-03 -> 3.58e-03

total runtime to train this model was 53.71023106575012 seconds

evaluation in 10.363298654556274 seconds

Loss: 0.8383

Train Accuracy: 70.37%

Test Accuracy: 72.80%

Google Drive already mounted.

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

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

built data in 1.6524438858032227 seconds

LR changed during epoch: 1.47e-04 -> 1.31e-04

total runtime to train this model was 53.529170751571655 seconds
evaluation in 10.562758684158325 seconds

Loss: 0.1830

Train Accuracy: 93.49%

Test Accuracy: 84.46%

Google Drive already mounted.

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

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

built data in 1.8395133018493652 seconds

LR changed during epoch: 2.79e-04 -> 2.69e-04

total runtime to train this model was 54.11025667190552 seconds

evaluation in 10.406489610671997 seconds

Loss: 0.2587

Train Accuracy: 90.77%

Test Accuracy: 82.40%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6472227573394775 seconds

LR changed during epoch: 3.94e-05 -> 3.63e-05

total runtime to train this model was 71.86770224571228 seconds

evaluation in 10.644813299179077 seconds

Loss: 0.2506

Train Accuracy: 91.12%

Test Accuracy: 82.76%

Google Drive already mounted.

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

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

==== PBT Exploit & Explore ===

Top performers: [84.46]

Bottom performers: [72.8]

Member 1 copied from 2

LR=5.00e-03, WD=0.147, DropPath=0.284, Warmup=7 epochs, Batch=256

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

Time: 371.26s (Avg member: 74.25s)
Population Mean Accuracy: 80.97%
Best Member Accuracy: 84.46%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.208

=====

Epoch 46/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6462111473083496 seconds
LR changed during epoch: 1.06e-04 -> 9.36e-05
total runtime to train this model was 72.16442847251892 seconds
evaluation in 10.595075368881226 seconds
Loss: 0.3469
Train Accuracy: 87.89%
Test Accuracy: 83.06%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6846601963043213 seconds
LR changed during epoch: 3.64e-06 -> 7.18e-04
total runtime to train this model was 53.864564180374146 seconds
evaluation in 10.362250804901123 seconds
Loss: 0.2831
Train Accuracy: 89.90%
Test Accuracy: 79.80%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.62424898147583 seconds
LR changed during epoch: 1.31e-04 -> 1.15e-04
total runtime to train this model was 53.495537519454956 seconds
evaluation in 10.405898332595825 seconds
Loss: 0.1678
Train Accuracy: 94.06%
Test Accuracy: 84.60%
Google Drive already mounted.

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

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

built data in 1.691636323928833 seconds

LR changed during epoch: 2.69e-04 -> 2.58e-04

total runtime to train this model was 53.747504234313965 seconds

evaluation in 10.741951942443848 seconds

Loss: 0.2483

Train Accuracy: 91.25%

Test Accuracy: 82.51%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.7672159671783447 seconds

LR changed during epoch: 3.63e-05 -> 3.33e-05

total runtime to train this model was 71.774343252182 seconds

evaluation in 10.393085479736328 seconds

Loss: 0.2356

Train Accuracy: 91.68%

Test Accuracy: 83.76%

Google Drive already mounted.

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

=====

Epoch 46 Summary:

=====

Time: 370.65s (Avg member: 74.13s)

Population Mean Accuracy: 82.75%

Best Member Accuracy: 84.60%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.208

=====

Epoch 47/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.8003568649291992 seconds

LR changed during epoch: 9.36e-05 -> 8.14e-05

total runtime to train this model was 71.94376277923584 seconds
evaluation in 10.392024040222168 seconds

Loss: 0.3325

Train Accuracy: 88.38%

Test Accuracy: 83.07%

Google Drive already mounted.

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

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

built data in 1.7820632457733154 seconds

LR changed during epoch: 7.18e-04 -> 1.43e-03

total runtime to train this model was 53.92871069908142 seconds
evaluation in 10.605778932571411 seconds

Loss: 0.5687

Train Accuracy: 79.62%

Test Accuracy: 73.57%

Google Drive already mounted.

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

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

built data in 1.6473381519317627 seconds

LR changed during epoch: 1.15e-04 -> 1.00e-04

total runtime to train this model was 53.53591871261597 seconds
evaluation in 10.442415952682495 seconds

Loss: 0.1475

Train Accuracy: 94.71%

Test Accuracy: 84.69%

Google Drive already mounted.

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

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

built data in 1.6155188083648682 seconds

LR changed during epoch: 2.58e-04 -> 2.48e-04

total runtime to train this model was 53.69320774078369 seconds
evaluation in 10.450141668319702 seconds

Loss: 0.2259

Train Accuracy: 92.06%

Test Accuracy: 82.41%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---
built data in 1.812929630279541 seconds
LR changed during epoch: 3.33e-05 -> 3.03e-05
total runtime to train this model was 71.64187240600586 seconds
evaluation in 10.371306419372559 seconds
Loss: 0.2223
Train Accuracy: 92.17%
Test Accuracy: 83.81%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====
Epoch 47 Summary:

=====
Time: 370.76s (Avg member: 74.15s)
Population Mean Accuracy: 81.51%
Best Member Accuracy: 84.69%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.208

=====
Epoch 48/60

--- Training Member 0 (Batch size: 64) ---
built data in 1.6801915168762207 seconds
LR changed during epoch: 8.14e-05 -> 7.00e-05
total runtime to train this model was 71.52427077293396 seconds
evaluation in 10.368852376937866 seconds
Loss: 0.3178
Train Accuracy: 88.83%
Test Accuracy: 83.29%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6199498176574707 seconds
LR changed during epoch: 1.43e-03 -> 2.15e-03
total runtime to train this model was 53.71147561073303 seconds
evaluation in 10.65684700012207 seconds

Loss: 0.7259
Train Accuracy: 74.41%
Test Accuracy: 73.38%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7513182163238525 seconds
LR changed during epoch: 1.00e-04 -> 8.62e-05
total runtime to train this model was 53.815502405166626 seconds
evaluation in 10.46116590499878 seconds

Loss: 0.1342
Train Accuracy: 95.18%
Test Accuracy: 84.99%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.653822422027588 seconds
LR changed during epoch: 2.48e-04 -> 2.37e-04
total runtime to train this model was 53.76742482185364 seconds
evaluation in 10.408281087875366 seconds

Loss: 0.2148
Train Accuracy: 92.37%
Test Accuracy: 82.94%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6222021579742432 seconds
LR changed during epoch: 3.03e-05 -> 2.75e-05
total runtime to train this model was 71.38887429237366 seconds
evaluation in 10.306665420532227 seconds

Loss: 0.2102
Train Accuracy: 92.55%
Test Accuracy: 83.64%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 48 Summary:

```
=====
```

Time: 369.33s (Avg member: 73.87s)

Population Mean Accuracy: 81.65%

Best Member Accuracy: 84.99%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.208

```
=====
```

Epoch 49/60

```
=====
```

--- Training Member 0 (Batch size: 64) ---

built data in 1.650076150894165 seconds

LR changed during epoch: 7.00e-05 -> 5.94e-05

total runtime to train this model was 71.19235634803772 seconds

evaluation in 10.321093320846558 seconds

Loss: 0.3036

Train Accuracy: 89.22%

Test Accuracy: 83.42%

Google Drive already mounted.

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

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

built data in 1.6651482582092285 seconds

LR changed during epoch: 2.15e-03 -> 2.86e-03

total runtime to train this model was 53.67876195907593 seconds

evaluation in 10.427521467208862 seconds

Loss: 0.8033

Train Accuracy: 71.61%

Test Accuracy: 70.30%

Google Drive already mounted.

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

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

built data in 1.7991242408752441 seconds

LR changed during epoch: 8.62e-05 -> 7.32e-05

total runtime to train this model was 53.59020161628723 seconds

evaluation in 10.609529733657837 seconds

Loss: 0.1181

Train Accuracy: 95.88%

Test Accuracy: 85.03%

Google Drive already mounted.

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

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

built data in 1.6574475765228271 seconds

LR changed during epoch: 2.37e-04 -> 2.26e-04

total runtime to train this model was 54.12933325767517 seconds

evaluation in 10.43722128868103 seconds

Loss: 0.1992

Train Accuracy: 93.00%

Test Accuracy: 82.91%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6295557022094727 seconds

LR changed during epoch: 2.75e-05 -> 2.47e-05

total runtime to train this model was 71.30047917366028 seconds

evaluation in 10.415542602539062 seconds

Loss: 0.1944

Train Accuracy: 93.19%

Test Accuracy: 84.13%

Google Drive already mounted.

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

=====

Epoch 49 Summary:

=====

Time: 368.96s (Avg member: 73.79s)

Population Mean Accuracy: 81.16%

Best Member Accuracy: 85.03%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.208

=====

Epoch 50/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.6296579837799072 seconds
LR changed during epoch: 5.94e-05 -> 4.95e-05
total runtime to train this model was 71.09217715263367 seconds
evaluation in 10.354433536529541 seconds
Loss: 0.2865
Train Accuracy: 90.01%
Test Accuracy: 83.28%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6449849605560303 seconds
LR changed during epoch: 2.86e-03 -> 3.58e-03
total runtime to train this model was 53.64690065383911 seconds
evaluation in 10.443994522094727 seconds
Loss: 0.8374
Train Accuracy: 70.35%
Test Accuracy: 72.26%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6409227848052979 seconds
LR changed during epoch: 7.32e-05 -> 6.11e-05
total runtime to train this model was 53.55783748626709 seconds
evaluation in 10.593833923339844 seconds
Loss: 0.1131
Train Accuracy: 96.10%
Test Accuracy: 85.25%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6987645626068115 seconds
LR changed during epoch: 2.26e-04 -> 2.15e-04
total runtime to train this model was 53.906872510910034 seconds
evaluation in 10.406630754470825 seconds
Loss: 0.1889
Train Accuracy: 93.40%
Test Accuracy: 83.20%
Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---
built data in 1.6813569068908691 seconds
LR changed during epoch: 2.47e-05 -> 2.20e-05
total runtime to train this model was 71.74512052536011 seconds
evaluation in 10.381418943405151 seconds

Loss: 0.1836
Train Accuracy: 93.65%
Test Accuracy: 83.70%

Google Drive already mounted.

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

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

==== PBT Exploit & Explore ===

Top performers: [85.25]
Bottom performers: [72.26]

Member 1 copied from 2

LR=5.00e-03, WD=0.202, DropPath=0.247, Warmup=9 epochs, Batch=256

=====

Epoch 50 Summary:

=====

Time: 369.32s (Avg member: 73.86s)

Population Mean Accuracy: 81.54%

Best Member Accuracy: 85.25%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.219

=====

Epoch 51/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.664109468460083 seconds
LR changed during epoch: 4.95e-05 -> 4.05e-05
total runtime to train this model was 72.54046726226807 seconds
evaluation in 10.371412992477417 seconds
Loss: 0.2724
Train Accuracy: 90.36%

Test Accuracy: 83.34%

Google Drive already mounted.

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

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

built data in 1.6456882953643799 seconds

LR changed during epoch: 2.83e-06 -> 5.58e-04

total runtime to train this model was 53.61335349082947 seconds

evaluation in 10.403631210327148 seconds

Loss: 0.2132

Train Accuracy: 92.36%

Test Accuracy: 79.70%

Google Drive already mounted.

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

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

built data in 1.6750383377075195 seconds

LR changed during epoch: 6.11e-05 -> 4.99e-05

total runtime to train this model was 53.51231265068054 seconds

evaluation in 10.48011064529419 seconds

Loss: 0.0983

Train Accuracy: 96.62%

Test Accuracy: 85.27%

Google Drive already mounted.

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

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

built data in 1.7712595462799072 seconds

LR changed during epoch: 2.15e-04 -> 2.04e-04

total runtime to train this model was 54.020304679870605 seconds

evaluation in 10.484844446182251 seconds

Loss: 0.1778

Train Accuracy: 93.62%

Test Accuracy: 83.34%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.649165153503418 seconds

LR changed during epoch: 2.20e-05 -> 1.95e-05

total runtime to train this model was 71.81083130836487 seconds
evaluation in 10.326262950897217 seconds

Loss: 0.1731

Train Accuracy: 93.88%

Test Accuracy: 83.92%

Google Drive already mounted.

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

=====

Epoch 51 Summary:

=====

Time: 370.34s (Avg member: 74.07s)

Population Mean Accuracy: 83.11%

Best Member Accuracy: 85.27%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.219

=====

Epoch 52/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.6151864528656006 seconds

LR changed during epoch: 4.05e-05 -> 3.23e-05

total runtime to train this model was 72.14310717582703 seconds

evaluation in 10.536815166473389 seconds

Loss: 0.2582

Train Accuracy: 90.90%

Test Accuracy: 83.38%

Google Drive already mounted.

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

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

built data in 1.6422271728515625 seconds

LR changed during epoch: 5.58e-04 -> 1.11e-03

total runtime to train this model was 53.704864740371704 seconds

evaluation in 10.378811120986938 seconds

Loss: 0.4881

Train Accuracy: 82.65%

Test Accuracy: 78.11%

Google Drive already mounted.

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

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

built data in 1.623687505722046 seconds

LR changed during epoch: 4.99e-05 -> 3.99e-05

total runtime to train this model was 53.481481075286865 seconds

evaluation in 10.473849058151245 seconds

Loss: 0.0920

Train Accuracy: 96.78%

Test Accuracy: 85.38%

Google Drive already mounted.

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

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

built data in 1.737029790878296 seconds

LR changed during epoch: 2.04e-04 -> 1.93e-04

total runtime to train this model was 53.898892641067505 seconds

evaluation in 10.615367412567139 seconds

Loss: 0.1616

Train Accuracy: 94.20%

Test Accuracy: 83.47%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.778470516204834 seconds

LR changed during epoch: 1.95e-05 -> 1.71e-05

total runtime to train this model was 73.1015419960022 seconds

evaluation in 10.34209656715393 seconds

Loss: 0.1606

Train Accuracy: 94.37%

Test Accuracy: 83.91%

Google Drive already mounted.

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

=====

Epoch 52 Summary:

=====

Time: 372.18s (Avg member: 74.44s)

Population Mean Accuracy: 82.85%

Best Member Accuracy: 85.38%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.219

=====
Epoch 53/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.7662765979766846 seconds
LR changed during epoch: 3.23e-05 -> 2.51e-05
total runtime to train this model was 72.21579027175903 seconds
evaluation in 10.381092309951782 seconds

Loss: 0.2473
Train Accuracy: 91.43%
Test Accuracy: 83.79%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6650629043579102 seconds
LR changed during epoch: 1.11e-03 -> 1.67e-03
total runtime to train this model was 53.88860630989075 seconds
evaluation in 10.581944942474365 seconds

Loss: 0.6483
Train Accuracy: 77.29%
Test Accuracy: 74.02%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.826812982559204 seconds
LR changed during epoch: 3.99e-05 -> 3.09e-05
total runtime to train this model was 53.409791707992554 seconds
evaluation in 10.438256740570068 seconds

Loss: 0.0846
Train Accuracy: 97.09%
Test Accuracy: 85.34%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.679887294769287 seconds
LR changed during epoch: 1.93e-04 -> 1.82e-04
total runtime to train this model was 53.786478757858276 seconds
evaluation in 10.462409973144531 seconds
Loss: 0.1555
Train Accuracy: 94.54%
Test Accuracy: 83.99%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6524522304534912 seconds
LR changed during epoch: 1.71e-05 -> 1.48e-05
total runtime to train this model was 71.34814095497131 seconds
evaluation in 10.339096546173096 seconds
Loss: 0.1506
Train Accuracy: 94.71%
Test Accuracy: 84.45%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 53 Summary:

=====

Time: 369.86s (Avg member: 73.97s)
Population Mean Accuracy: 82.32%
Best Member Accuracy: 85.34%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.219

=====

Epoch 54/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6545536518096924 seconds
LR changed during epoch: 2.51e-05 -> 1.88e-05
total runtime to train this model was 71.12187814712524 seconds
evaluation in 10.338244438171387 seconds

Loss: 0.2361
Train Accuracy: 91.77%
Test Accuracy: 83.79%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6263527870178223 seconds

LR changed during epoch: 1.67e-03 -> 2.23e-03
total runtime to train this model was 53.68647646903992 seconds

evaluation in 10.441822290420532 seconds

Loss: 0.7314

Train Accuracy: 74.13%

Test Accuracy: 74.20%

Google Drive already mounted.

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

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

built data in 1.762739658355713 seconds

LR changed during epoch: 3.09e-05 -> 2.31e-05

total runtime to train this model was 53.4833025932312 seconds

evaluation in 10.570594310760498 seconds

Loss: 0.0768

Train Accuracy: 97.31%

Test Accuracy: 85.37%

Google Drive already mounted.

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

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

built data in 1.6760270595550537 seconds

LR changed during epoch: 1.82e-04 -> 1.71e-04

total runtime to train this model was 53.79487156867981 seconds

evaluation in 10.463804721832275 seconds

Loss: 0.1374

Train Accuracy: 95.20%

Test Accuracy: 82.88%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.6366002559661865 seconds
LR changed during epoch: 1.48e-05 -> 1.27e-05
total runtime to train this model was 71.26543831825256 seconds
evaluation in 10.388880252838135 seconds
Loss: 0.1424
Train Accuracy: 95.03%
Test Accuracy: 84.29%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 54 Summary:

=====

Time: 368.86s (Avg member: 73.77s)
Population Mean Accuracy: 82.11%
Best Member Accuracy: 85.37%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.219

=====

Epoch 55/60

=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.5879473686218262 seconds
LR changed during epoch: 1.88e-05 -> 1.34e-05
total runtime to train this model was 71.1199836730957 seconds
evaluation in 10.32909083366394 seconds
Loss: 0.2267
Train Accuracy: 92.04%
Test Accuracy: 83.82%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.5834476947784424 seconds
LR changed during epoch: 2.23e-03 -> 2.78e-03
total runtime to train this model was 53.72270059585571 seconds
evaluation in 10.419913053512573 seconds
Loss: 0.7932
Train Accuracy: 72.03%

Test Accuracy: 73.13%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6786086559295654 seconds
LR changed during epoch: 2.31e-05 -> 1.64e-05
total runtime to train this model was 53.44968867301941 seconds
evaluation in 10.683880090713501 seconds

Loss: 0.0724
Train Accuracy: 97.43%
Test Accuracy: 85.35%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.748708963394165 seconds
LR changed during epoch: 1.71e-04 -> 1.60e-04
total runtime to train this model was 53.95478916168213 seconds
evaluation in 10.37533688545227 seconds

Loss: 0.1329
Train Accuracy: 95.32%
Test Accuracy: 83.74%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6626574993133545 seconds
LR changed during epoch: 1.27e-05 -> 1.07e-05
total runtime to train this model was 71.91758561134338 seconds
evaluation in 10.410698175430298 seconds

Loss: 0.1312
Train Accuracy: 95.37%
Test Accuracy: 84.22%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 55) ---

==== PBT Exploit & Explore ===

Top performers: [85.35]
Bottom performers: [73.13]
Member 1 copied from 2
LR=5.00e-03, WD=0.244, DropPath=0.228, Warmup=10 epochs, Batch=256

=====
Epoch 55 Summary:

Time: 369.08s (Avg member: 73.81s)
Population Mean Accuracy: 82.05%
Best Member Accuracy: 85.35%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.227

=====
Epoch 56/60

--- Training Member 0 (Batch size: 64) ---
built data in 1.7504992485046387 seconds
LR changed during epoch: 1.34e-05 -> 8.94e-06
total runtime to train this model was 72.31719279289246 seconds
evaluation in 10.377024412155151 seconds
Loss: 0.2208
Train Accuracy: 92.28%
Test Accuracy: 83.95%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6590321063995361 seconds
LR changed during epoch: 2.55e-06 -> 5.03e-04
total runtime to train this model was 53.66488075256348 seconds
evaluation in 10.40238070487976 seconds

Loss: 0.1909
Train Accuracy: 93.20%
Test Accuracy: 81.06%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

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

built data in 1.636042833328247 seconds
LR changed during epoch: 1.64e-05 -> 1.09e-05
total runtime to train this model was 53.43460702896118 seconds
evaluation in 10.587113380432129 seconds
Loss: 0.0688
Train Accuracy: 97.65%
Test Accuracy: 85.47%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.770819902420044 seconds
LR changed during epoch: 1.60e-04 -> 1.50e-04
total runtime to train this model was 53.968236446380615 seconds
evaluation in 10.410527467727661 seconds
Loss: 0.1209
Train Accuracy: 95.80%
Test Accuracy: 84.09%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6179168224334717 seconds
LR changed during epoch: 1.07e-05 -> 8.95e-06
total runtime to train this model was 71.32459211349487 seconds
evaluation in 10.371037006378174 seconds
Loss: 0.1230
Train Accuracy: 95.67%
Test Accuracy: 84.07%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 56 Summary:

=====

Time: 369.71s (Avg member: 73.94s)
Population Mean Accuracy: 83.73%
Best Member Accuracy: 85.47%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.227

```
=====
Epoch 57/60
=====
```

--- Training Member 0 (Batch size: 64) ---
built data in 1.5716264247894287 seconds
LR changed during epoch: 8.94e-06 -> 5.47e-06
total runtime to train this model was 72.15916776657104 seconds
evaluation in 10.366062879562378 seconds
Loss: 0.2140
Train Accuracy: 92.55%
Test Accuracy: 83.98%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.6264703273773193 seconds
LR changed during epoch: 5.03e-04 -> 1.00e-03
total runtime to train this model was 53.66447687149048 seconds
evaluation in 10.40379548072815 seconds
Loss: 0.4441
Train Accuracy: 84.09%
Test Accuracy: 76.64%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6483559608459473 seconds
LR changed during epoch: 1.09e-05 -> 6.56e-06
total runtime to train this model was 53.32400131225586 seconds
evaluation in 10.440908193588257 seconds
Loss: 0.0648
Train Accuracy: 97.79%
Test Accuracy: 85.70%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.7985975742340088 seconds
LR changed during epoch: 1.50e-04 -> 1.39e-04

total runtime to train this model was 53.80054068565369 seconds
evaluation in 10.542652606964111 seconds

Loss: 0.1025

Train Accuracy: 96.39%

Test Accuracy: 84.24%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.610471487045288 seconds

LR changed during epoch: 8.95e-06 -> 7.31e-06

total runtime to train this model was 71.59734201431274 seconds
evaluation in 10.558357238769531 seconds

Loss: 0.1156

Train Accuracy: 96.00%

Test Accuracy: 84.48%

Google Drive already mounted.

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

=====

Epoch 57 Summary:

=====

Time: 370.10s (Avg member: 74.02s)

Population Mean Accuracy: 83.01%

Best Member Accuracy: 85.70%

Mean Batch Size: 179

Mean Learning Rate: 1.35e-03

Mean Weight Decay: 0.227

=====

Epoch 58/60

=====

--- Training Member 0 (Batch size: 64) ---

built data in 1.642021656036377 seconds

LR changed during epoch: 5.47e-06 -> 2.99e-06

total runtime to train this model was 72.00951051712036 seconds
evaluation in 10.574638605117798 seconds

Loss: 0.2099

Train Accuracy: 92.75%

Test Accuracy: 84.12%

Google Drive already mounted.

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

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

built data in 1.6845676898956299 seconds

LR changed during epoch: 1.00e-03 -> 1.50e-03

total runtime to train this model was 53.85269856452942 seconds

evaluation in 10.422790050506592 seconds

Loss: 0.6126

Train Accuracy: 78.21%

Test Accuracy: 73.95%

Google Drive already mounted.

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

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

built data in 1.68794584274292 seconds

LR changed during epoch: 6.56e-06 -> 3.47e-06

total runtime to train this model was 53.50350379943848 seconds

evaluation in 10.44874882698059 seconds

Loss: 0.0640

Train Accuracy: 97.82%

Test Accuracy: 85.62%

Google Drive already mounted.

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

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

built data in 1.6641724109649658 seconds

LR changed during epoch: 1.39e-04 -> 1.29e-04

total runtime to train this model was 53.666863203048706 seconds

evaluation in 10.517160177230835 seconds

Loss: 0.0975

Train Accuracy: 96.60%

Test Accuracy: 83.77%

Google Drive already mounted.

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

--- Training Member 4 (Batch size: 64) ---

built data in 1.7392032146453857 seconds

LR changed during epoch: 7.31e-06 -> 5.86e-06

total runtime to train this model was 71.87034392356873 seconds

evaluation in 10.559350490570068 seconds

Loss: 0.1105
Train Accuracy: 96.17%
Test Accuracy: 84.31%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 58 Summary:
=====

Time: 370.30s (Avg member: 74.06s)
Population Mean Accuracy: 82.35%
Best Member Accuracy: 85.62%
Mean Batch Size: 179
Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.227

=====

Epoch 59/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.7827467918395996 seconds
LR changed during epoch: 2.99e-06 -> 1.50e-06
total runtime to train this model was 72.28479862213135 seconds
evaluation in 10.373934507369995 seconds

Loss: 0.2075
Train Accuracy: 92.84%
Test Accuracy: 84.04%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.8020620346069336 seconds
LR changed during epoch: 1.50e-03 -> 2.00e-03
total runtime to train this model was 53.907041788101196 seconds
evaluation in 10.47509074211206 seconds

Loss: 0.7117
Train Accuracy: 74.82%
Test Accuracy: 72.75%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.6397817134857178 seconds
LR changed during epoch: 3.47e-06 -> 1.61e-06
total runtime to train this model was 53.39213943481445 seconds
evaluation in 10.40699577331543 seconds
Loss: 0.0627
Train Accuracy: 97.91%
Test Accuracy: 85.61%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_2_seed_38042.pt

--- Training Member 3 (Batch size: 256) ---
built data in 1.6348068714141846 seconds
LR changed during epoch: 1.29e-04 -> 1.19e-04
total runtime to train this model was 53.55654859542847 seconds
evaluation in 10.460290908813477 seconds
Loss: 0.0912
Train Accuracy: 96.80%
Test Accuracy: 83.96%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.7936768531799316 seconds
LR changed during epoch: 5.86e-06 -> 4.58e-06
total runtime to train this model was 71.50726127624512 seconds
evaluation in 10.369924306869507 seconds
Loss: 0.1052
Train Accuracy: 96.34%
Test Accuracy: 84.56%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

=====

Epoch 59 Summary:

=====

Time: 370.48s (Avg member: 74.10s)
Population Mean Accuracy: 82.18%
Best Member Accuracy: 85.61%
Mean Batch Size: 179

Mean Learning Rate: 1.35e-03
Mean Weight Decay: 0.227

=====
Epoch 60/60
=====

--- Training Member 0 (Batch size: 64) ---
built data in 1.6440701484680176 seconds
LR changed during epoch: 1.50e-06 -> 1.00e-06
total runtime to train this model was 71.38336133956909 seconds
evaluation in 10.361953496932983 seconds
Loss: 0.2070
Train Accuracy: 92.74%
Test Accuracy: 84.11%
Google Drive already mounted.
Member 0: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_0_seed_38042.pt

--- Training Member 1 (Batch size: 256) ---
built data in 1.7718706130981445 seconds
LR changed during epoch: 2.00e-03 -> 2.50e-03
total runtime to train this model was 53.79608488082886 seconds
evaluation in 10.471813678741455 seconds
Loss: 0.7715
Train Accuracy: 72.64%
Test Accuracy: 71.39%
Google Drive already mounted.
Member 1: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_1_seed_38042.pt

--- Training Member 2 (Batch size: 256) ---
built data in 1.7579083442687988 seconds
LR changed during epoch: 1.61e-06 -> 1.00e-06
total runtime to train this model was 53.60116267204285 seconds
evaluation in 10.432382822036743 seconds
Loss: 0.0598
Train Accuracy: 98.00%
Test Accuracy: 85.73%
Google Drive already mounted.
Member 2: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/
pbt_checkpoints/model_2_seed_38042.pt

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

built data in 1.6537971496582031 seconds
LR changed during epoch: 1.19e-04 -> 1.09e-04
total runtime to train this model was 53.68078899383545 seconds
evaluation in 10.388176918029785 seconds
Loss: 0.0825
Train Accuracy: 97.12%
Test Accuracy: 84.15%
Google Drive already mounted.
Member 3: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_3_seed_38042.pt

--- Training Member 4 (Batch size: 64) ---
built data in 1.6272282600402832 seconds
LR changed during epoch: 4.58e-06 -> 3.50e-06
total runtime to train this model was 71.01778316497803 seconds
evaluation in 10.356034278869629 seconds
Loss: 0.1011
Train Accuracy: 96.54%
Test Accuracy: 84.45%
Google Drive already mounted.
Member 4: Checkpoint saved to /content/drive/MyDrive/Colab_Checkpoints/pbt_checkpoints/model_4_seed_38042.pt

--- Population Update (Epoch 60) ---

==== PBT Exploit & Explore ====
Top performers: [85.73]
Bottom performers: [71.39]
Member 1: LR changed from 5.00e-03 to 4.32e-03
Member 1 copied from 2
LR=4.32e-03, WD=0.272, DropPath=0.193, Warmup=10 epochs, Batch=256

=====
Epoch 60 Summary:
=====
Time: 368.77s (Avg member: 73.75s)
Population Mean Accuracy: 81.97%
Best Member Accuracy: 85.73%
Mean Batch Size: 179
Mean Learning Rate: 1.21e-03
Mean Weight Decay: 0.233
=====

PBT TRAINING COMPLETE

Best member: 2
Best accuracy: 85.73%

Best hyperparameters:

Learning Rate: 6.30e-04
Weight Decay: 0.155
Drop Path Rate: 0.159
Warmup Epochs: 10
Batch Size: 256

PBT TIMING REPORT

Overall Statistics	Value
Total runtime	22407.55s (373.46 min)
Number of epochs	60
Number of population updates	12

Epoch Timing	Value
Average epoch time	373.43s
Std epoch time	5.41s
Min epoch time	362.81s (epoch 1)
Max epoch time	390.93s (epoch 26)

Member Training Timing	Value
Average member time per epoch	74.69s
Total training time	22405.76s
Training efficiency	100.0%

Population Update Timing	Value
Average update time	0.01s
Total update time	0.13s
Update efficiency	0.0%

Batch Size Analysis	Avg Time	Samples
<hr/>		
Batch size 64	84.88s	125
Batch size 128	71.50s	20
Batch size 256	66.88s	155
Per-Member Statistics	Avg Time	Total Time
<hr/>		
Member 0	84.90s	5094.20s
Member 1	69.78s	4186.79s
Member 2	66.85s	4011.25s
Member 3	67.03s	4021.73s
Member 4	84.86s	5091.79s
<hr/>		
<hr/>		