Graph Run Report

workflow 873eeb94-ce8e-4976-bfd6-79d1b4a678d7

Run Configuration

parameter	value
seed	42
dataset_type	standard
num_nodes	8
edge_prob	0.1000
num_samples_per_graph	10
num_graphs	10000
num_timesteps	100
num_actions	10
test_fraction	0.2000
network_type	plastic
hidden_dim	128
epochs	50
trainer_batch_size	512
lr	0.0005
val_split	0.2000
scheduler	cosine
git_hash	1f2cc0b8c30a9d0fa0003714f3a219dd2eb695a2
distributed	True
world_size	4
rank	0
local_rank	0
long_timesteps	2000
long_window_size	100
boundary_num_graphs	10
boundary_repeats_per_graph	10
boundary_window_size	100
plastic_batch_size	128
device	NVIDIA H200
training_time	12m 27.81s

Key Metrics

metric	value
avg_rolling_accuracy_graph_set	96.98%
avg_rolling_accuracy_single_graph	98.05%
best_epoch	48
best_val_loss	0.3244
final_train_accuracy	87.06%
final_train_loss	0.3251
final_val_accuracy	87.08%
final_val_loss	0.3245
num_actions	10
num_nodes	8
num_parameters_fast	2097152
num_parameters_slow	8232
num_parameters_total	2105384
num_test_graphs	2000
num_train_graphs	10000
optimal_prediction_rate	95.58%
test_constraints_ok	yes
test_next_node_accuracy	87.00%
train_constraints_ok	yes
triplet_overlap_fraction	100.00%
wp_matrix_size	128 x 128

Visualizations

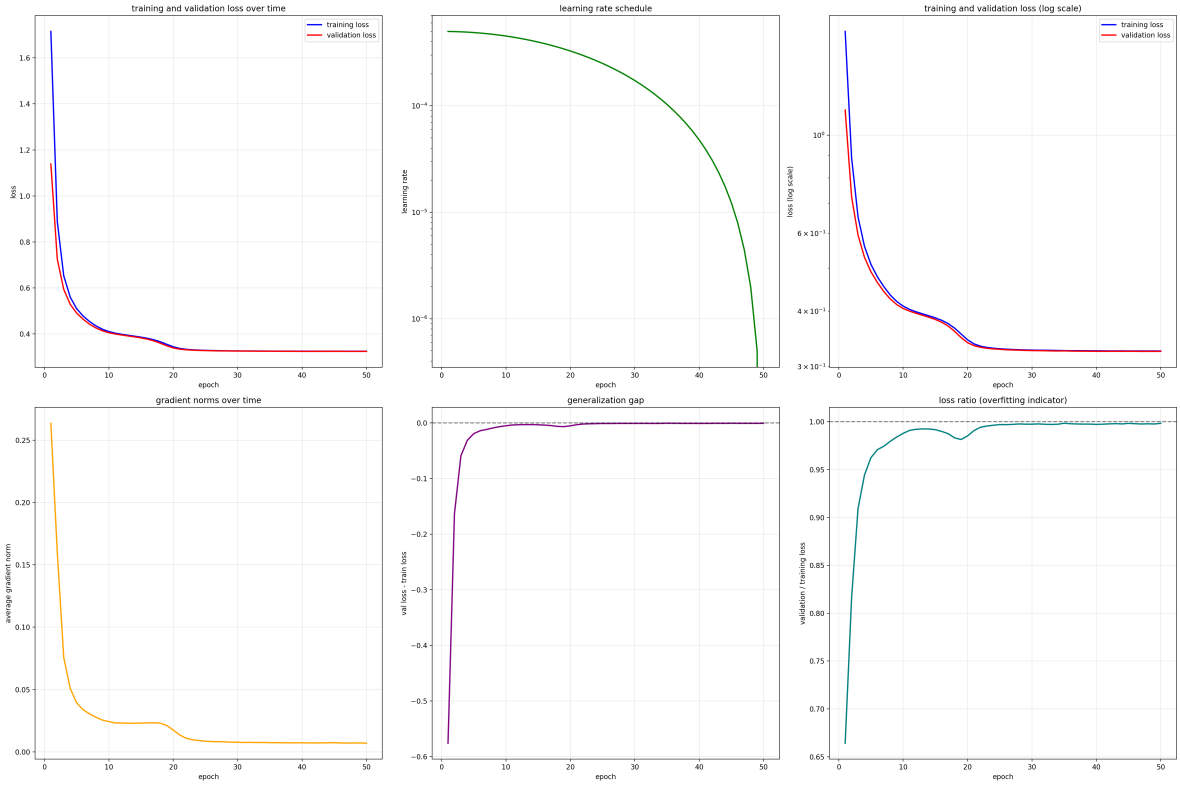


Figure 1: training and validation curves

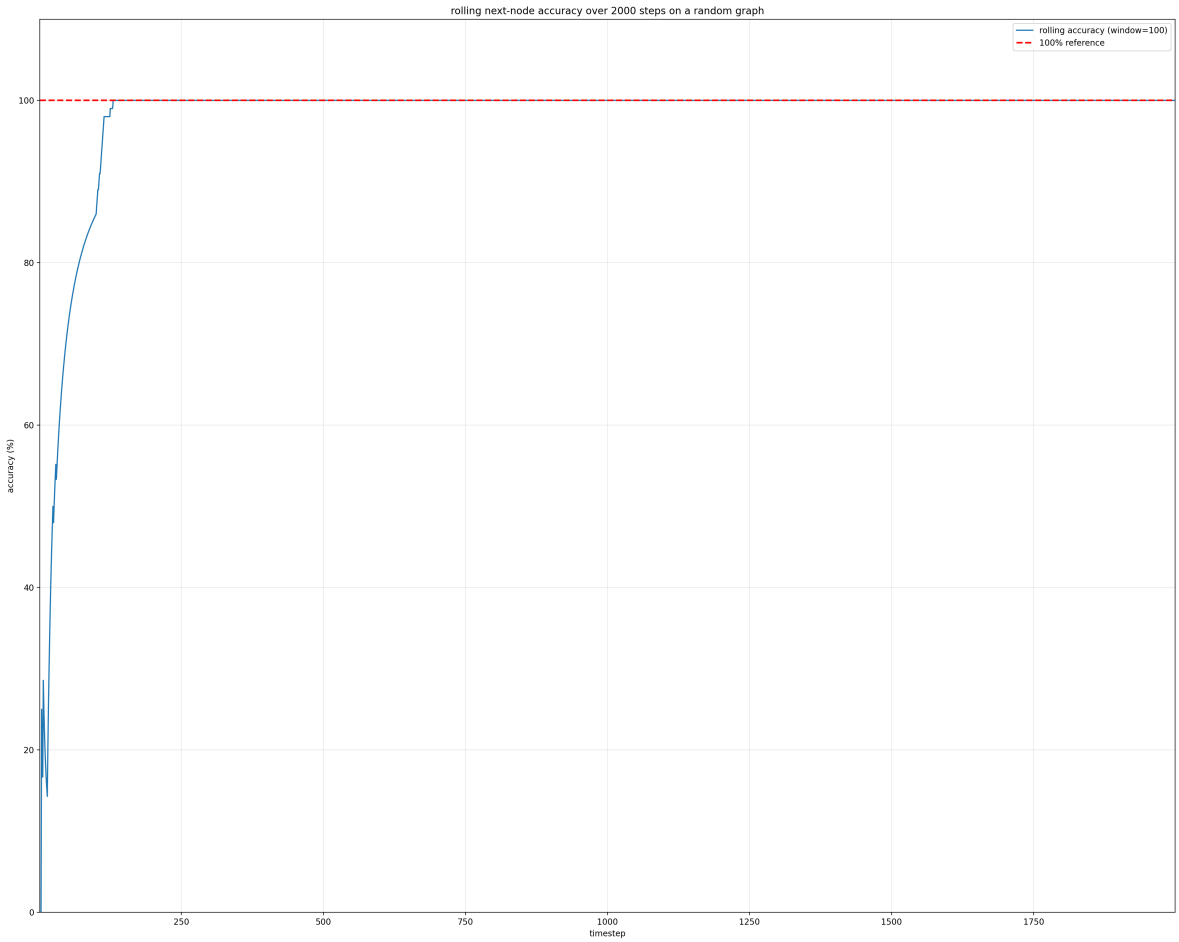


Figure 2: rolling accuracy (single graph)

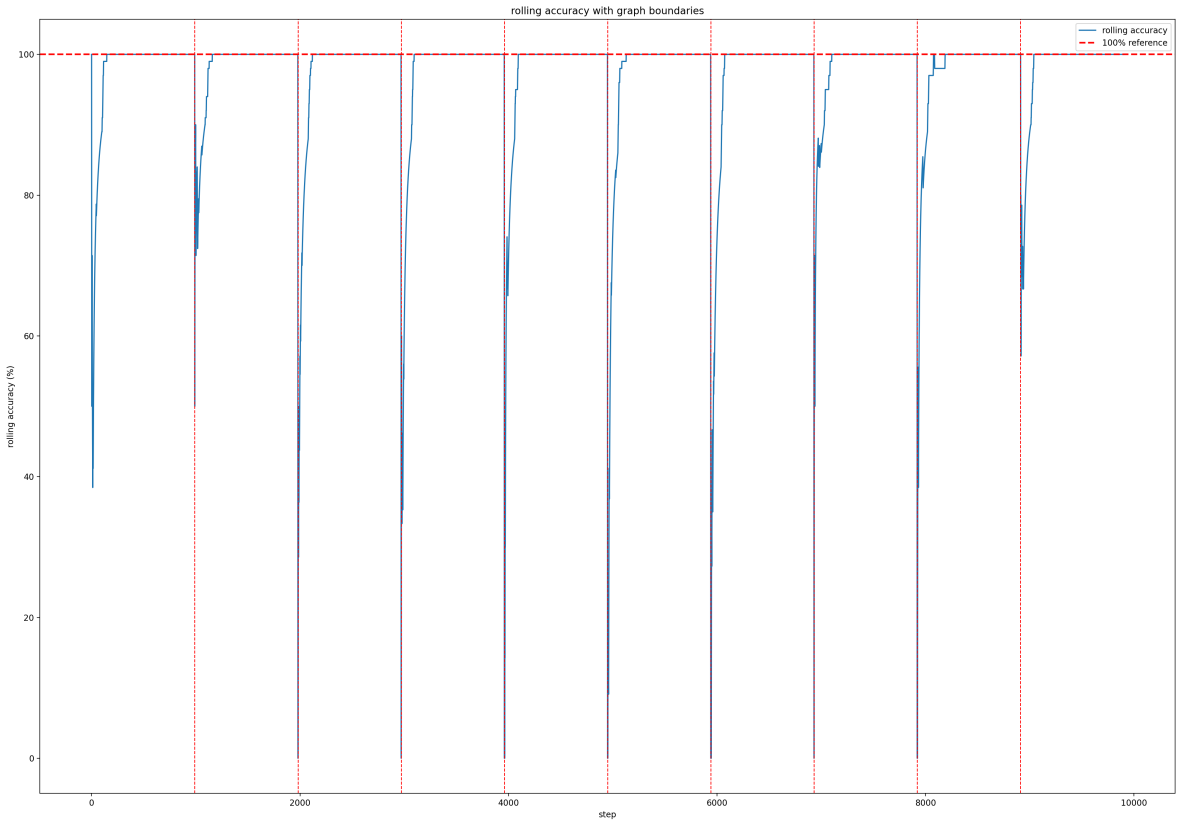
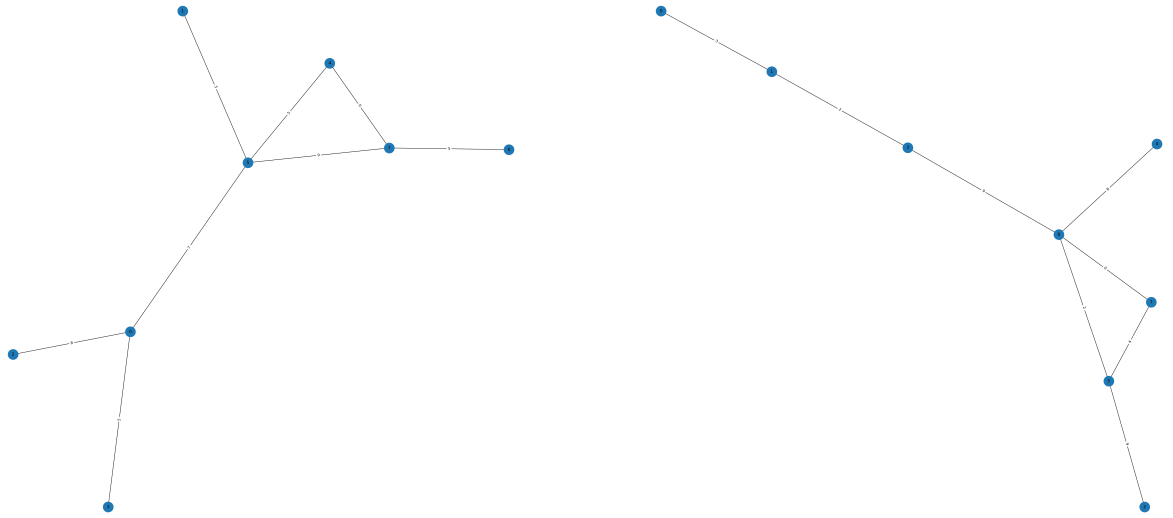


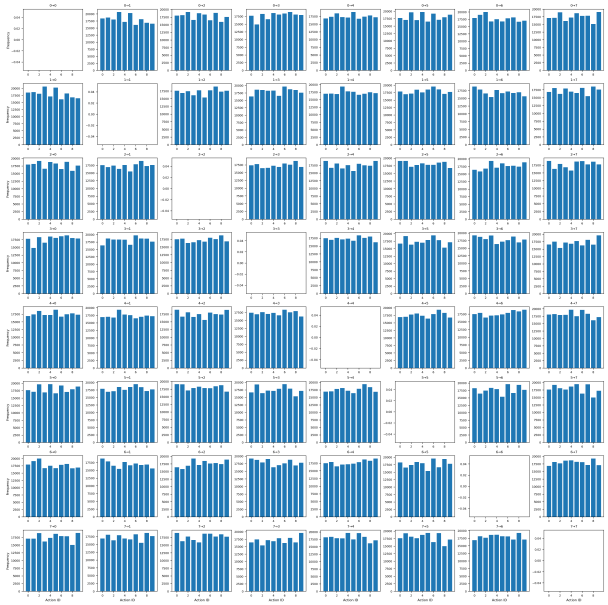
Figure 3: rolling accuracy across graph boundaries



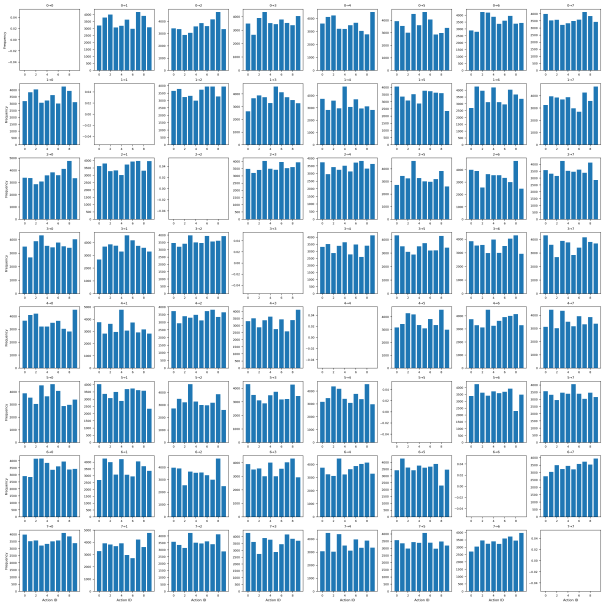
train split example

test split example

Figure 4: random graphs



train action-id histogram



test action-id histogram

Figure 5: action distributions