

Graph Run Report

workflow fc97e7fd-066e-4194-9ae2-0250963a7dc2

Run Configuration

parameter	value
seed	42
dataset_type	standard
num_nodes	50
edge_prob	0.0500
num_samples_per_graph	10
num_graphs	15000
num_timesteps	250
num_actions	15
test_fraction	0.2000
network_type	plastic
hidden_dim	725
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	6000
long_window_size	100
boundary_num_graphs	10
boundary_repeats_per_graph	50
boundary_window_size	100
plastic_batch_size	128
device	NVIDIA H200
training_time	3h 2m 56.72s

Key Metrics

metric	value
avg_rolling_accuracy_graph_set	95.78%
avg_rolling_accuracy_single_graph	93.44%
best_epoch	48
best_val_loss	1.7014
final_train_accuracy	58.22%
final_train_loss	1.7012
final_val_accuracy	58.23%
final_val_loss	1.7014
num_actions	15
num_nodes	50
num_parameters_fast	67280000
num_parameters_slow	233765
num_parameters_total	67513765
num_test_graphs	3000
num_train_graphs	15000
optimal_prediction_rate	83.14%
test_constraints_ok	yes
test_next_node_accuracy	58.19%
train_constraints_ok	yes
triplet_overlap_fraction	100.00%
wp_matrix_size	725 x 725

Visualizations

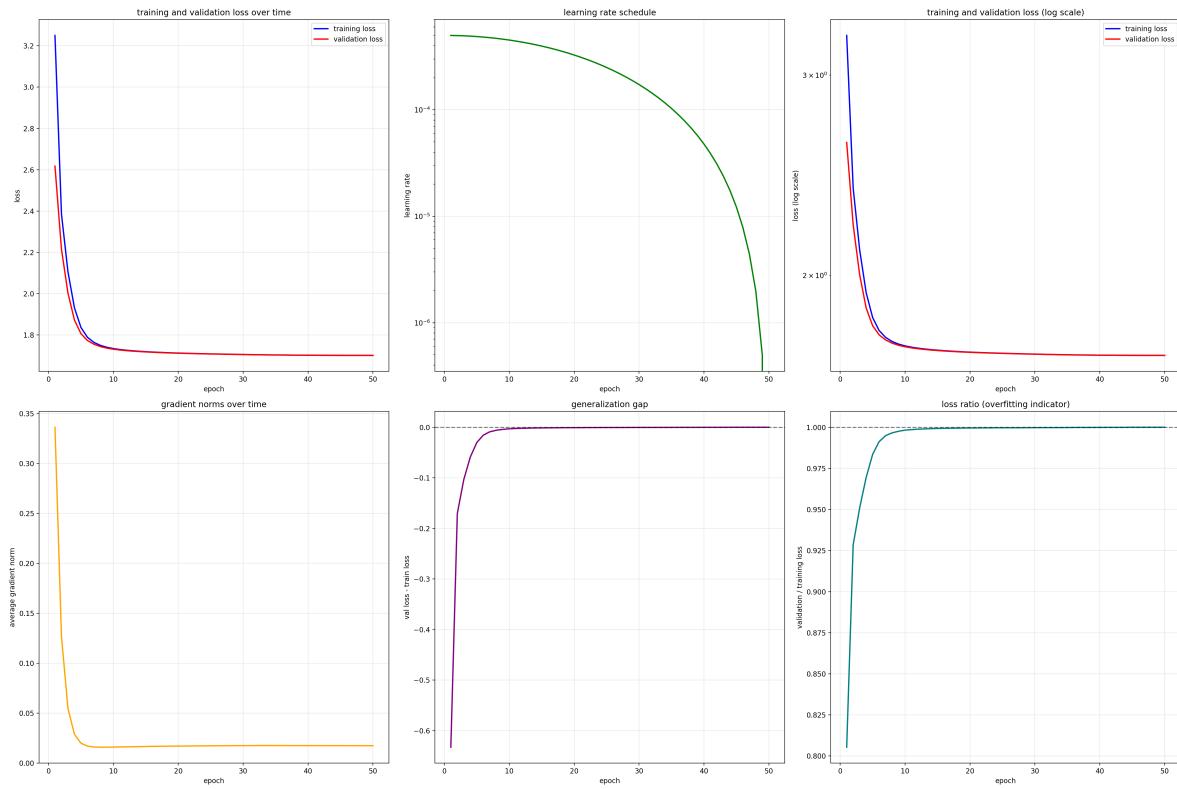


Figure 1: training and validation curves

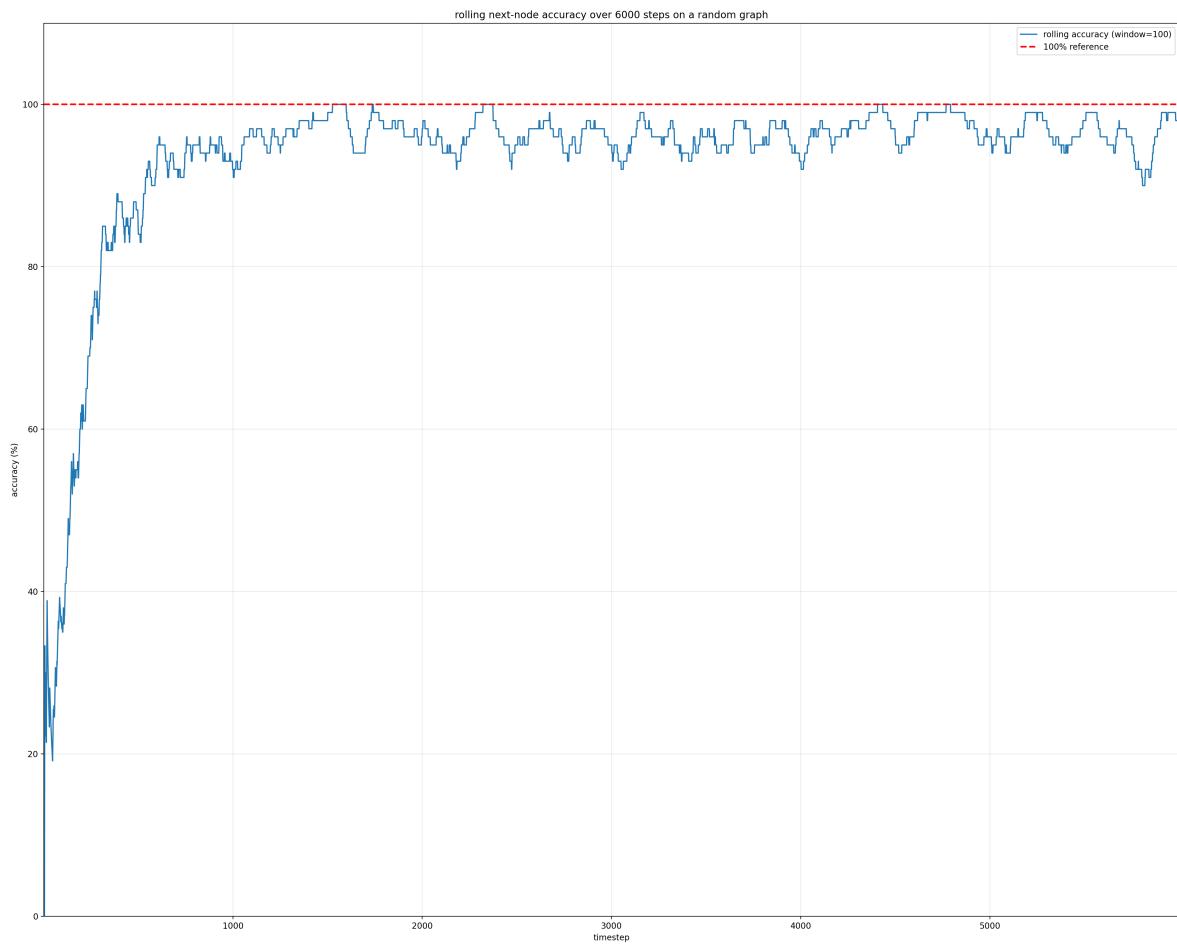


Figure 2: rolling accuracy (single graph)

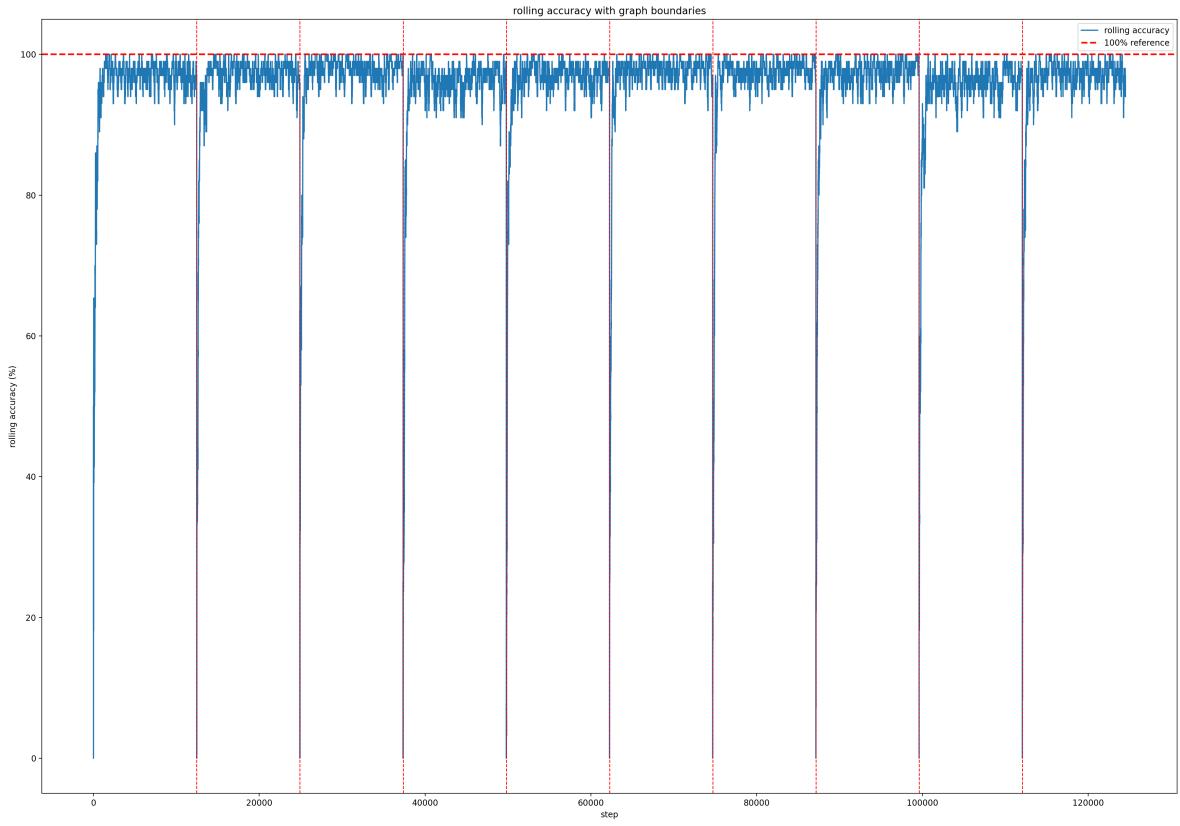


Figure 3: rolling accuracy across graph boundaries

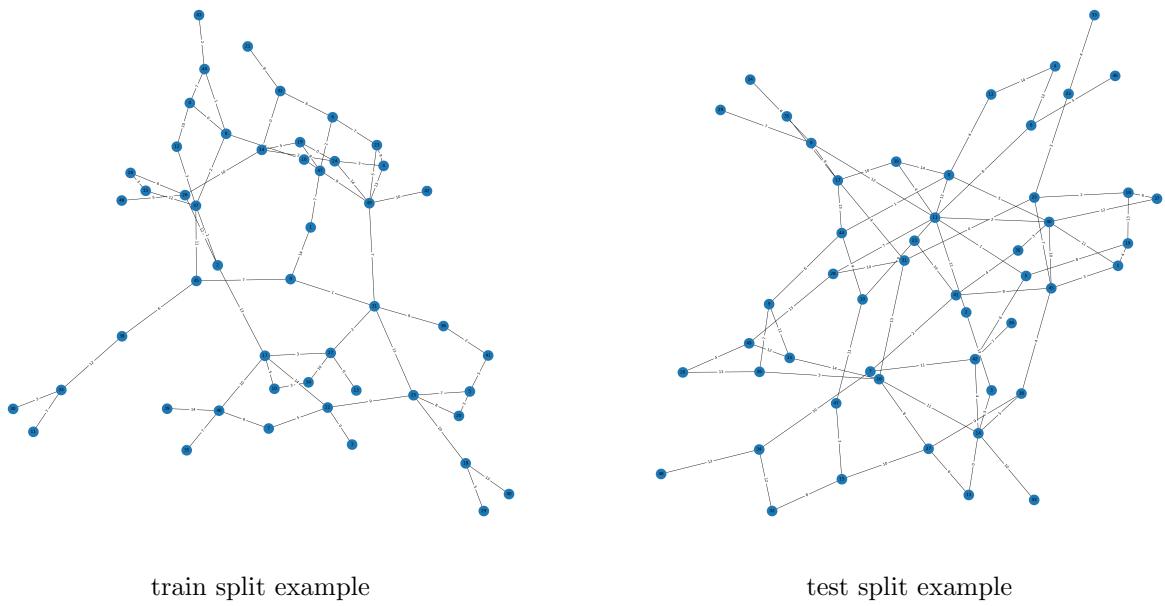
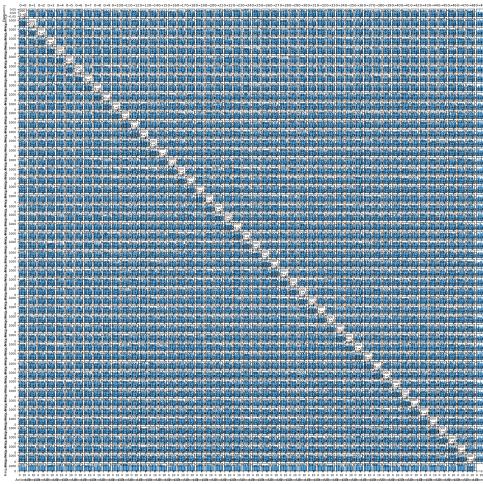
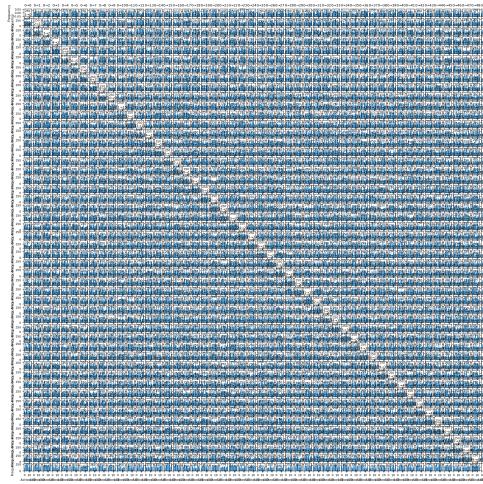


Figure 4: random graphs



train action-id histogram



test action-id histogram

Figure 5: action distributions