

# Graph Run Report

workflow 2a915826-d4b7-4ebd-8fcd-ac655cd599f3

## Run Configuration

parameter	value
seed	42
dataset_type	disjoint
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 25.52s

## Key Metrics

metric	value
avg_rolling_accuracy_graph_set	96.96%
avg_rolling_accuracy_single_graph	98.43%
best_epoch	45
best_val_loss	0.3131
final_train_accuracy	87.74%
final_train_loss	0.3135
final_val_accuracy	87.74%
final_val_loss	0.3134
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	95.54%
test_constraints_ok	yes
test_next_node_accuracy	86.00%
train_constraints_ok	yes
triplet_overlap_fraction	0.00%
wp_matrix_size	128 x 128

# Visualizations

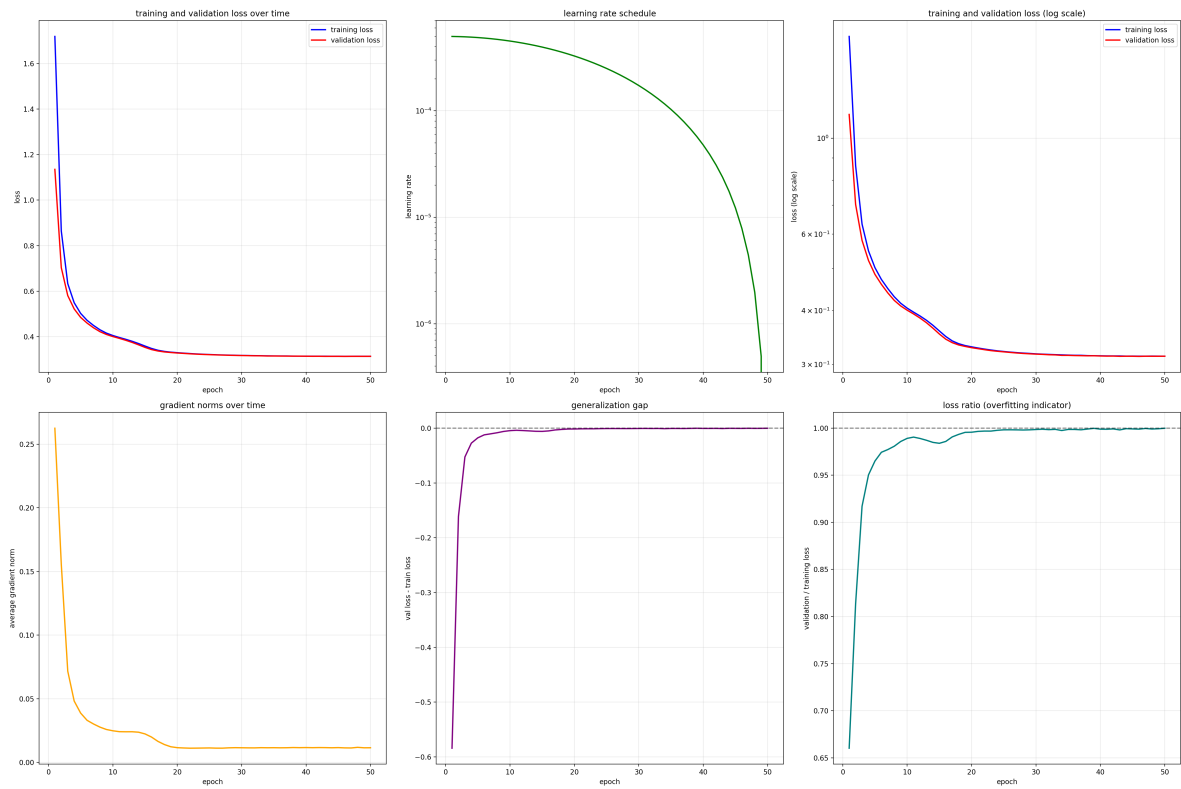


Figure 1: training and validation curves

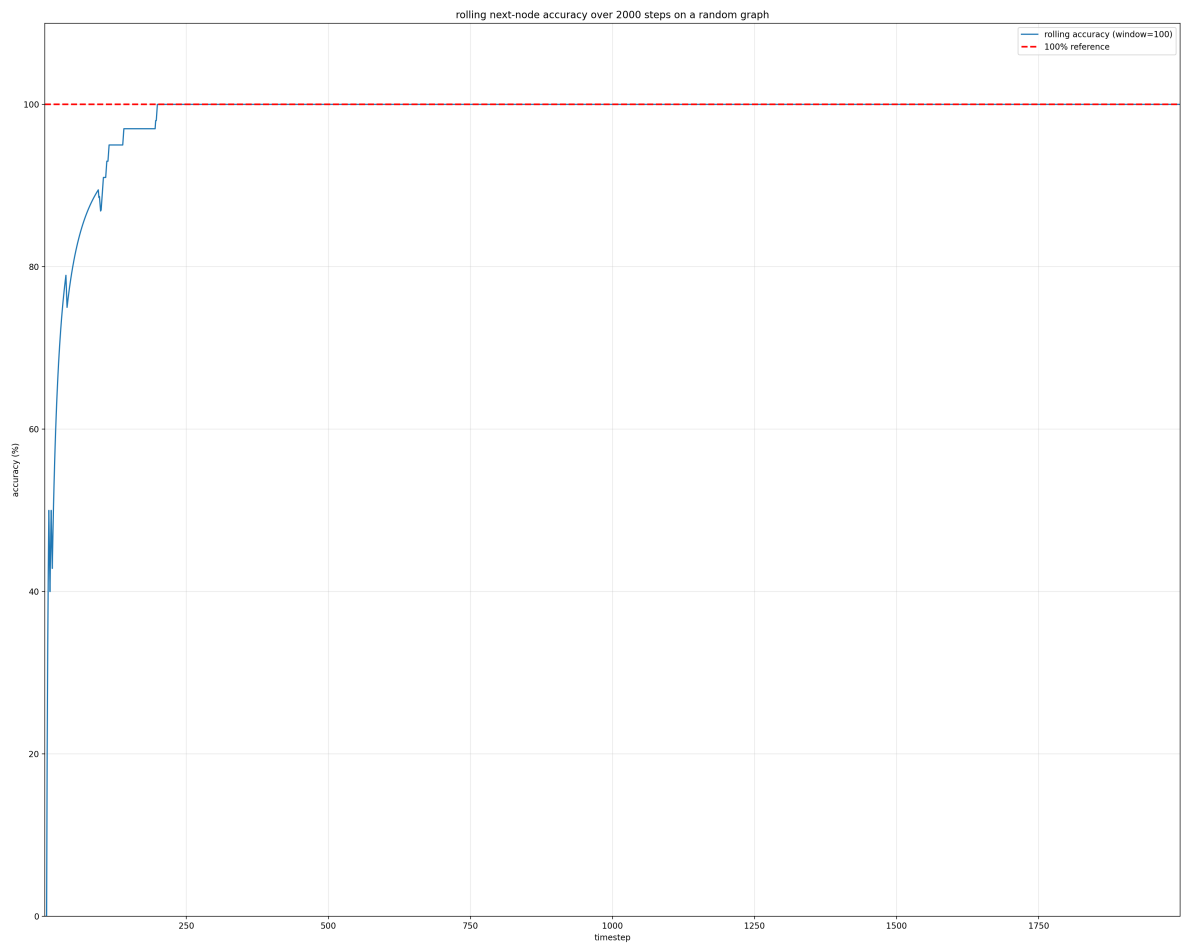


Figure 2: rolling accuracy (single graph)

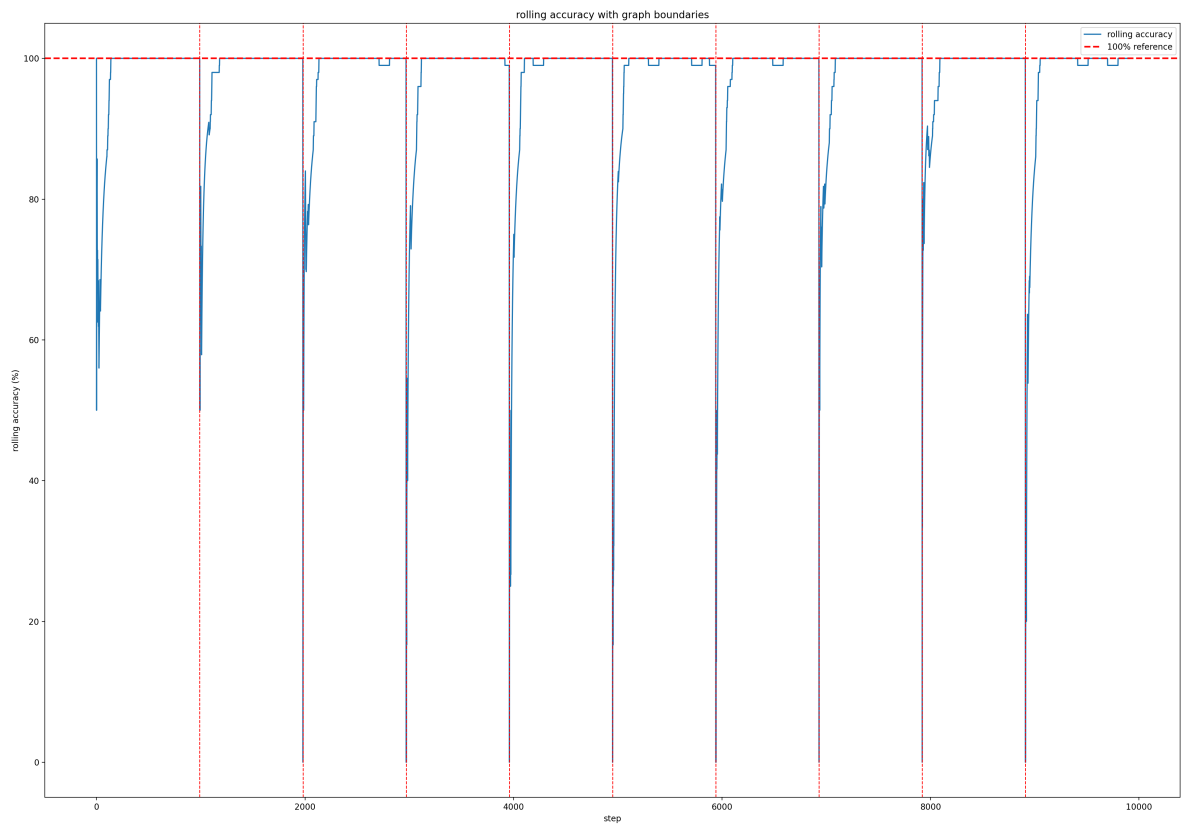


Figure 3: rolling accuracy across graph boundaries

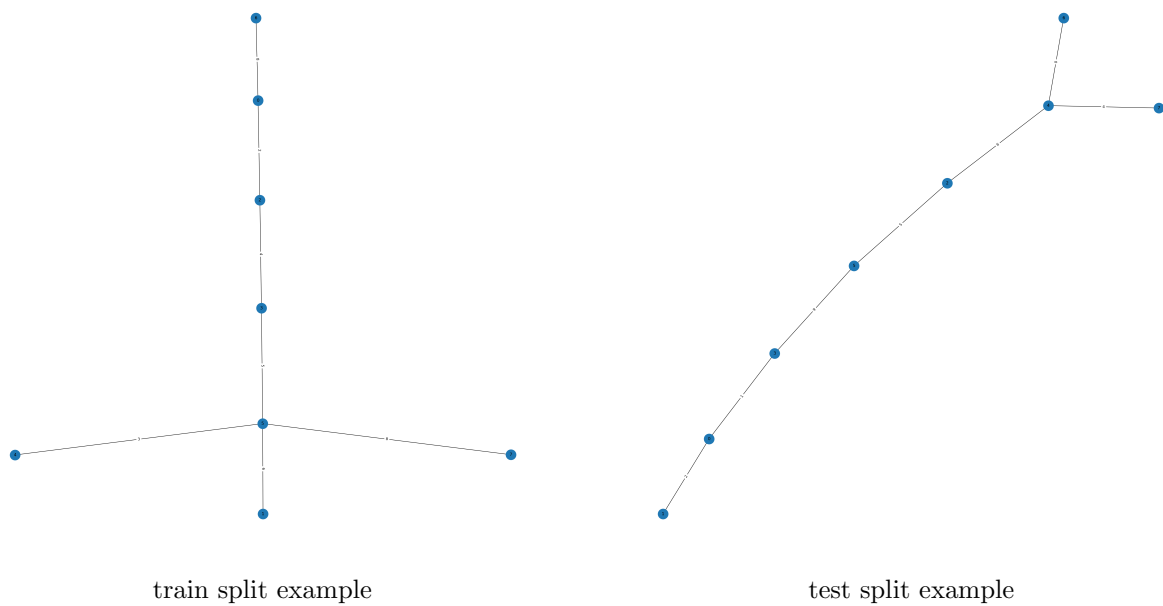


Figure 4: random graphs

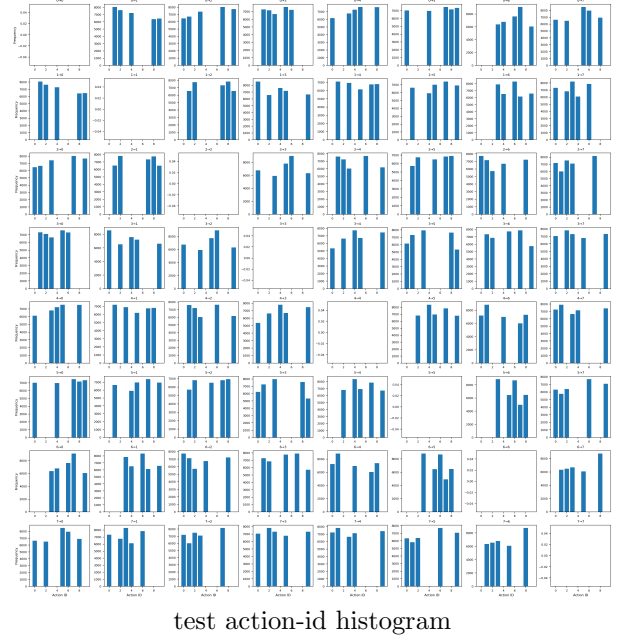
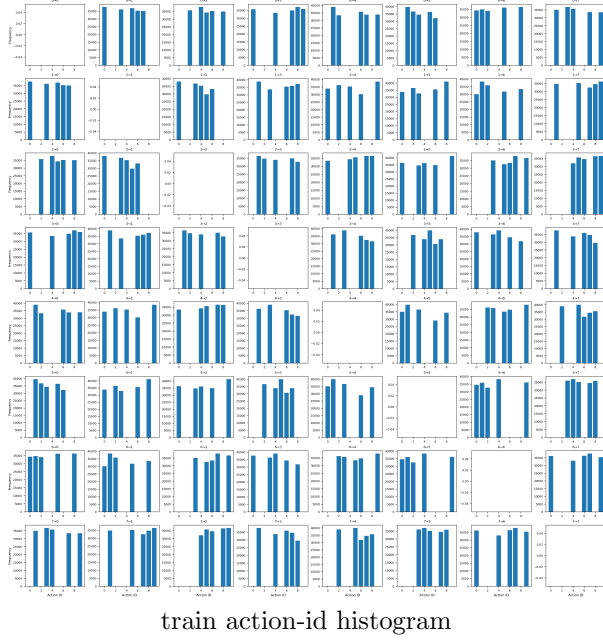


Figure 5: action distributions