

Complete System Performance Summary

Metric	RelationalGNN (A)	MultiModalGNN (C)	Winner
Micro Accuracy	97.0%	96.5%	A 🏆
Macro F1	0.358	0.348	A 🏆
is_near F1	0.954	0.920	A 🏆
Latency (mean)	1.52ms	24.29ms	A (16×)
Memory (peak)	19.4MB	141.8MB	A (7×)
Model Size	0.81MB	2.14MB	A (2.6×)
Training (55k)	29 min	31 min	—

** On synthetic test data (200 frames). Training accuracy measured on validation set.*