

Strategy Evaluation Results

Summary

Total Strategy Combinations	4
Total Test Cases	10000
Timestamp	2026-01-29 15:21:18

Strategy Performance

RULE_BASED NLP + DIJKSTRA Path Finder

Accuracy	60.32% (6032/10000)
Avg Execution Time	0.12 ms
Min Execution Time	0.06 ms
Max Execution Time	1.92 ms

RULE_BASED NLP + DIJKSTRA_TEST Path Finder

Accuracy	60.32% (6032/10000)
Avg Execution Time	0.11 ms
Min Execution Time	0.06 ms
Max Execution Time	0.59 ms

RULE_TEST NLP + DIJKSTRA Path Finder

Accuracy	60.32% (6032/10000)
----------	---------------------

Avg Execution Time	0.11 ms
Min Execution Time	0.06 ms
Max Execution Time	1.00 ms

RULE_TEST NLP + DIJKSTRA_TEST Path Finder

Accuracy	60.32% (6032/10000)
Avg Execution Time	0.11 ms
Min Execution Time	0.06 ms
Max Execution Time	0.76 ms

Results Per Strategy

RULE_BASED NLP + DIJKSTRA Path Finder

NLP Results

Inputs Processed	10000
Successfully Extracted	4219
Extraction Errors	5781
Avg Extraction Time	0.10 ms

Path Finder Results

Paths Computed	4219
Avg Computation Time	0.06 ms
Avg Path Length	3.28 stations

RULE_BASED NLP + DIJKSTRA_TEST Path Finder

NLP Results

Inputs Processed	10000
Successfully Extracted	4219
Extraction Errors	5781
Avg Extraction Time	0.09 ms

Path Finder Results

Paths Computed	4219
Avg Computation Time	0.05 ms
Avg Path Length	3.28 stations

RULE_TEST NLP + DIJKSTRA Path Finder

NLP Results

Inputs Processed	10000
Successfully Extracted	4219
Extraction Errors	5781
Avg Extraction Time	0.09 ms

Path Finder Results

Paths Computed	4219
Avg Computation Time	0.05 ms
Avg Path Length	3.28 stations

RULE_TEST NLP + DIJKSTRA_TEST Path Finder

NLP Results

Inputs Processed	10000
Successfully Extracted	4219
Extraction Errors	5781
Avg Extraction Time	0.09 ms

Path Finder Results

Paths Computed	4219
Avg Computation Time	0.05 ms
Avg Path Length	3.28 stations

NLP Results (Global)

The NLP component extracts departure and arrival stations from user input.

Total Inputs Processed	40000
Successfully Extracted	16876
Extraction Errors	23124
Avg Extraction Time	0.09 ms

Path Finder Results (Global)

The path finder computes the shortest route between two stations.

Total Paths Computed	16876
Avg Path Computation Time	0.05 ms
Avg Path Length	3.28 stations

Pipeline Results

End-to-end pipeline performance combining NLP and path finding.

Total Pipeline Executions	40000
Avg Total Time	0.11 ms
Min Total Time	0.06 ms
Max Total Time	1.92 ms