

RAG++ Architecture

5D Trajectory Memory Fabric for TrajectoryOS

TrajectoryCoordinate5D

D

Depth

Session nesting level

S

Sibling Order

Position among peers

H

Homogeneity

Neighbor similarity

T

Temporal

Turn index (normalized)

C

Complexity

Embedding variance

Rust Core

HNSWIndex

Hierarchical navigable small world graph for $O(\log n)$ ANN search

IRCPPropagator

Inverse Ring Contextual Propagation for attention weights

SalienceScorer

Compute importance based on trajectory position

TrajectoryCoordinate5D

5D coordinate computation and geodesics

Python ML

CognitiveTwin

ML model learning user reasoning patterns

HybridTrainer

Batch + incremental training pipeline

GlobalStyleSignature

EMA-based evolving style embedding

MemoryRetriever

Trajectory-aware semantic search

Storage

Supabase

PostgreSQL + pgvector extension

memory_turns

Unified knowledge fabric table

claude_prompts

Claude interaction logs

Vector Search

cosine_distance for embeddings