Program & Architecture Deep Dives (Appendix A)

WarSim Architecture

WarSim is a simulation-driven decision-support framework combining deterministic rules, stochastic modeling, and constrained AI outputs. It is used to evaluate escalation paths, system fragility, and intervention tradeoffs.

NAMECOMMS / Entropy Systems

NAMECOMMS applies entropy and anomaly detection concepts to identify non-random behavior in complex systems. The emphasis is on signal validation, false-positive suppression, and operational interpretability.

RAG Stack Design

The RAG architecture uses controlled corpora, recursive splitting, vector indexing, and strict prompt constraints. Retrieval governs what the model is allowed to say.

Validation & Auditability

Outputs are validated through retrieval grounding, deterministic scoring layers, and explicit handling of missing evidence. Unsupported claims are explicitly rejected.