

AtlasPro AI System Architecture

- User Interface
- Agent Orchestration
- MCP Protocol
- Core AI Backend
- Data Platform

User Interface
(Natural Language Queries)

Agentic Orchestration Layer

ReAct
Reasoning

Memory
Manager

Task
Planner

Tool
Selector

Safety
Guard

Model Context Protocol (MCP) Layer

GNN Query Tools

Spatial Analysis

Network Ops

External APIs

Core AI Backend

Graph Neural
Network Engine
(GCN, GAT, GraphSAGE)

Spatio-Temporal
GNN
(DCRNN, STGCN)

World Model
(Simulation &
Prediction)

LLM Integration
(GPT-4, Claude,
Gemini)

Data Platform

Graph
Database
(Neo4j)

Vector
Store
(Embeddings)

Geospatial
Data
(PostGIS)

Time Series
DB
(InfluxDB)

Document
Store

External
Data
Sources

Feedback
Loop