

# Overview

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This repository implements a next-generation transformer architecture with dynamic weight adjustment, memory-augmented reasoning, swarm learning, and safe self-modification capabilities.

## Key Components

- `core.py`: Dynamic Meta-Learning Layer
- `memory.py`: Memory-augmented DML
- `swarm.py`: Secure peer-to-peer communication
- `selfmodify.py`: Safe code generation and layer modification
- `reward.py`: Reinforcement learning via heuristic scoring
- `goal_manager.py`: Task selection based on past performance

## Real-World Use Cases

- Creative writing assistant
- Math tutoring
- Code generation
- Edge AI agents
- Autonomous research assistants