## **CareBridge High-Level Architecture**

CareBridge is a plug-and-play, self-contained mental health counseling solution designed for school environments. It securely enables real-time counseling sessions, generates intelligent case summaries, and provides privacy-preserving student support tools - all without relying on the cloud.

## **Core Components**

- Student Chat UI: Real-time, browser-based CBT chat client with WebSocket support.
- Counselor Chat UI: Therapist view with AI-trigger tools and transcript analysis.
- Study Pal: Student-facing follow-up tool to revisit personalized strategies.
- Local LLM: Generates case summaries and treatment plans from chat history.
- SQLite DB: Stores all conversation logs and plan data locally.
- Al Guardian: Monitors and restricts suspicious traffic from the CareBridge box.
- VPN Module: Embedded WireGuard server for secure remote access.

## **Architecture Diagram**

CareBridge - Local-first, Al-enhanced, School-ready.