**Executive Summary**

This project introduces an AI-powered IT support chatbot designed to streamline technical assistance by leveraging the combined power of OpenAI’s user interface and ChromaDB’s vector database technology. The chatbot functions as a responsive, intelligent help desk assistant, capable of addressing a wide range of IT-related queries in real time.

At the core of the system is a vector database built using ChromaDB, which stores semantically indexed embeddings of top-rated posts from ServerFault.com; a leading Q&A community for system and network administrators. These high-quality posts provide the chatbot with a robust, expert-level knowledge base covering common troubleshooting issues, best practices, and configuration advice across various IT domains.

The user interface is powered by OpenAI, offering a sleek, conversational experience that mimics human interaction while tapping into relevant support documentation and past solutions. The chatbot interprets user queries using natural language processing (NLP), matches them against the vectorized database, and returns accurate, context-aware responses tailored to the specific IT concern.

This AI-based IT support solution reduces dependency on human support staff, minimizes downtime, and provides users with fast, reliable answers to technical problems. It is scalable, continuously trainable, and adaptable for enterprise environments, making it a forward-looking tool in modern IT operations.