Automated Code Reviewer

Using OpenAI Codex / Hugging Face CodeGen for Python Code Review

— Rittika Ghosh

Introduction & Concept

1 **Objective**

Build an AI-powered tool to review Python code.

2 **Why AI?**

Reduces manual effort and enhances code readability.

3 **Instant Feedback**

Provides real-time feedback on syntax and best practices.
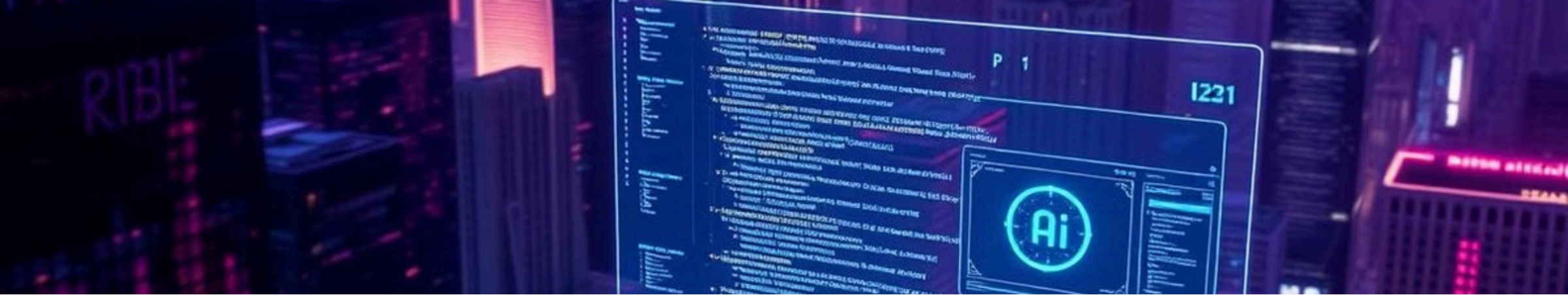
Approach & Implementation

AI Model

GPT-4o, Hugging Face CodeGen, StarCoder.

Workflow

Code upload, AI review, feedback, and output display.

Tech Stack

FastAPI, Streamlit, LangChain, Transformers, OpenAI API.

Made with Gamma

Challenges & Future Scope

1

Challenges

API limits, complex logic errors, dataset availability.

2

Real-time Debugging

Integrate with VS Code plugins.

3

Multi-Language Support

Add Java, JavaScript, and C++ support.

4

Explainable AI

Implement for better insights and improved AI training using RLHF.