Case Study





Advanced machine learning models for enhanced audio transcription



Team Composition:

3 Senior Engineers, 1 Project Manager



Project Duration:

6 months (fixed scope) & ongoing support phase



Tech Stack:

React, Python, Fast API, Azure, Next. Js

Project Overview

Transly.ai, built by Techverx, offers smart, cost-effective transcription using AssemblyAI, later enhanced with FasterWhisper and SpeechBrain. With serverless infrastructure, it delivers scalable, efficient, and future-ready audio-to-AI interaction.

Business Challenges

- High Costs & Limited Capabilities: Existing tools were expensive and lacked flexibility for advanced interaction.
- Machine Learning Integration: Needed a scalable, intelligent solution with high transcription accuracy and robust diarization.
- User Interaction Design: Building a platform with a friendly UI/UX that supports both transcription and AI-powered chat posed a complex design and integration task.

Solutions Delivered

- FasterWhisper Integration: Transitioned to a self-hosted FasterWhisper model for transcription with enhanced cost efficiency and accuracy.
- SpeechBrain for Diarization: Enabled speaker tracking, improving clarity in multi-speaker audio.
- GPT-Powered Chat Interface: Integrated OpenAI GPT to support interactive features like summarization and Q&A.
- Embeddable Chatbots: Developed customizable, embeddable chatbots for external websites, expanding the platform's usability.

Results & Impact

- Reduced Operational Costs via serverless architecture
- Advanced ML Integration for transcription and interaction
- Interactive Chat UX with embedded AI chatbot support
- Futureproofed and Scalable Architecture

Conclusion

 Transly.ai, engineered by Techverx, is a next-gen Al transcription and chatbot platform redefining industry standards with cost-efficiency, ML accuracy, and user-focused design—serving businesses, legal, education, and content sectors.

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