

AI Alliance for Audio Analytics



Build your AI Startup Hackathon Episode 2 2023

Team Members







Khalid Alnujaidi

Problem Statement

- Call centers face challenges such as lost customers, low satisfaction rates, and missed opportunities for revenue generation
- Audio Analytics with AI can revolutionize the call center industry:
 - Automated accurate quality assurance
 - Improved customer experiences hence increased revenue



Solution

Al conducting quality assurance on call center's recorded calls



- Transcribing the speech in the call to text (STT) using Whisper
- Employing Large Language Model (LLM) via GPT-3 for:
 - Extraction of essential data points
 - Sentiment analysis
 - Evaluating customer satisfaction
 - Issue & solution summarisation
 - Feedback including areas of improvement for the operator

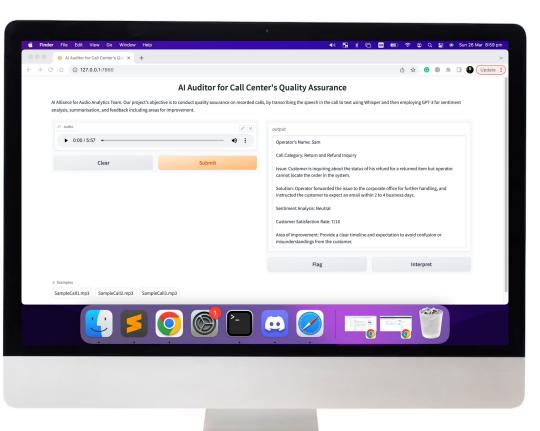
UI & Example

Audio Segmenting

Automatically transcribes audio to text

points such as operator name, issue, & solution

Automatically categorises the call



LLM conducts sentiment analysis

LLM evaluates customer's satisfaction

LLM provides areas of improvement for the operator

Market Potential

- The **global call center market** is projected to reach \$496 billion by 2027, with a CAGR of 10.5% from 2020 to 2027. (source: Allied Market Research)
- Call center outsourcing is a \$75 billion industry, and is projected to grow at a CAGR of 3.5% from 2020 to 2027. (source: Grand View Research)
- By 2025, the global voice recognition market is expected to reach \$27.16 billion, with a
 CAGR of 17.2% from 2020 to 2025. (source: MarketsandMarkets)
- The use of AI in call centers can reduce call time by up to 35% and increase customer satisfaction by up to 16%. (source: IBM)
- 70% of customers prefer self-service options, and AI-powered virtual agents can handle up to 80% of inquiries. (source: Accenture)



With such a massive market potential and proven benefits of Al-powered call center solutions, Audio Analytics with Al is poised to disrupt the call center industry and provide businesses with a competitive edge.

Competition

	TranscribeMe	Speechmatics	AI Alliance for Audio Analytics
Transcribing: Speech-to-Text (STT)	✓	✓	✓
AI Analytics	*	*	✓
Summarisation & Categorisation	*	*	✓
Customer Experience & Satisfaction Assessment	*	*	✓
Sentiment Analysis	×	×	✓
Area of Improvement Feedback for Operator	*	*	✓

Code Repository & Demo

GitHub Repository:

https://github.com/remaalgunaibet/AI-Alliance-for-Voice-Analytics---LabLab.ai-ChatGpt-Whisper-Hackathon

Try it now via this demo link:

https://huggingface.co/spaces/khalidnu/AI-Alliance-for-Audio-Analytics

Team Contact Details



Rema Algunaibet

Al & Machine Learning Specialist
Saudi Aramco

+966 500509398
reemaalguanibet@hotmail.com
linkedin.com/in/remaalgunaibet



Khalid Alnujaidi

Tech Entrepreneur | Developer |
R&D Expert

+966 546349719 <u>khalidnujaidi@gmail.com</u> linkedin.com/in/khalid-alnujaidi