Meet dwani.ai

dwani.ai: Knowledge from Curiosity

Accessible, Private, Open Source, Free

Anita’s Story

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- Anita cannot use Voice Tech

- English Only, Not Private

Why We Need dwani

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- Ever tried asking Siri or Alexa something in Kannada ? They don’t get it !

- Over 5 crore people speak kannada, but most voice tech ignores them

- dwani uses Open Source Tools to fix this - built for YOU !

What Makes dwani Special ?

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- Its **FREE** for anyone to use or tweak-like a community project !

- Runs on your premise, keeping your chats private.

- Uses Models released by AI4Bharat from IIT Madras

dwani.ai Team

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- Sachin Shetty - Software Engineer, 10+ year S/W , 2+ year GenAI

- Sahana Shetty - Robotics Engineer, “Human-Assisting Apparatus”, Indian Patent - 562119

- Nithish S - Embedded Engineer, Outreach and Community Management

Traction and Recognition

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- Selected for **Google for Startups Program -** 25,000 $ Cloud credits
- Selected for **Nvidia Inception Program**
- Selected for **Lambda Labs Startup Program** - 7500 $ GPU Credits
- **Zerodha** Open Source - Rs. 2.3 Lakhs Grant

What can Dwani Do?

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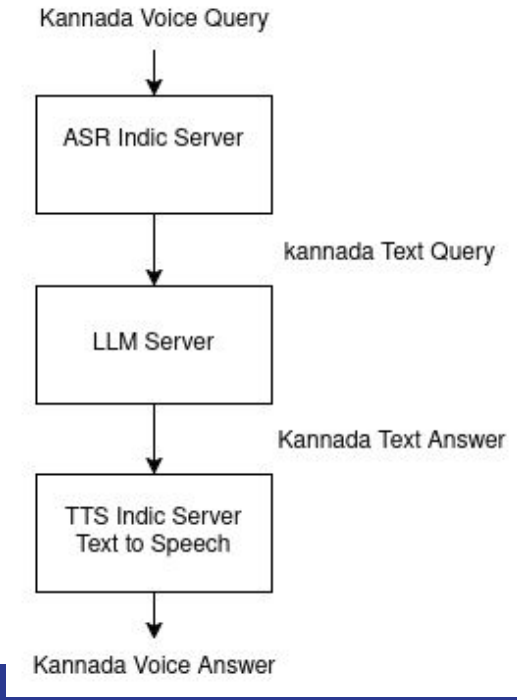
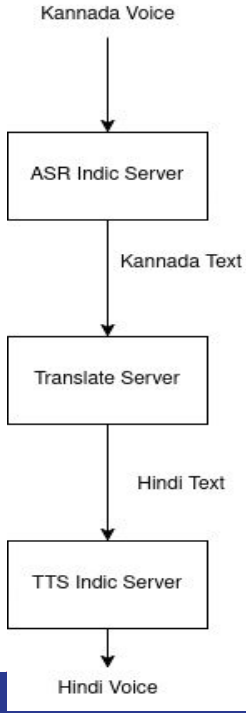
Chat In Kannada



Translate on the Fly



Current Status - 22 June, 2025

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Answer - Kannada

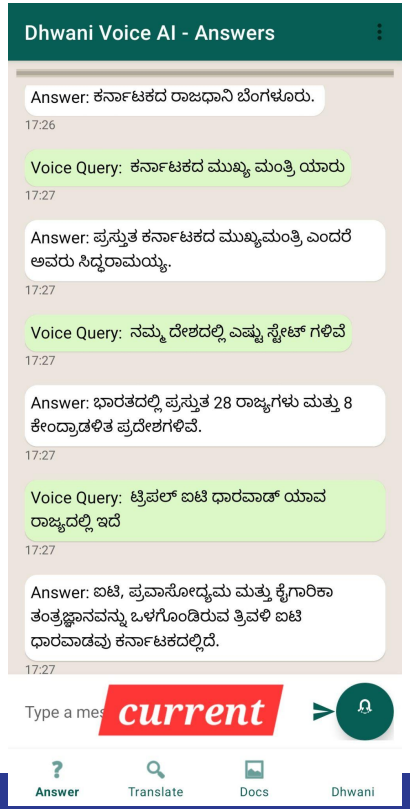
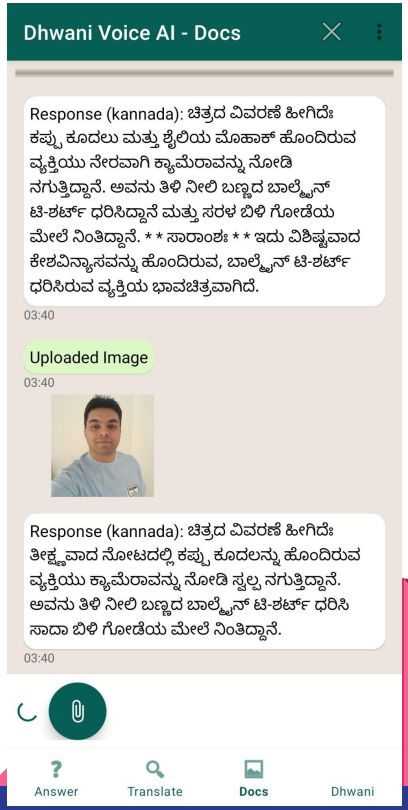


Image Query



Dwani App - Demo Video

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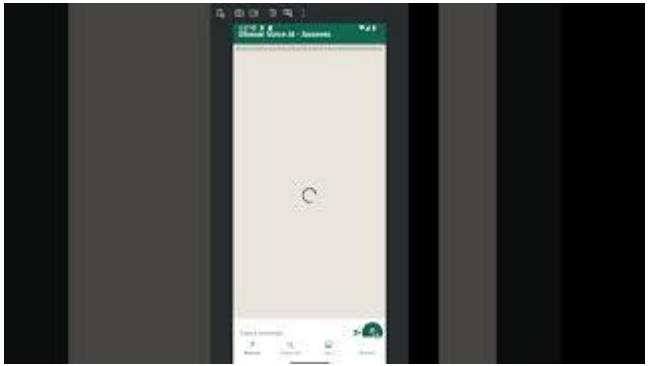
App - Features

Multi-language Query



dwani.ai - python-sdk

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- pip install dwani
- Credentials to use dwani.ai API
  - DWANI_API_BASE_URL = https://beta-api.dwani.ai
  -
  - DWANI_API_KEY = email_id + _dwani
  -
  - Ex : email_id : user-email@example.com
  - DWANI_API_KEY = user-email@example.com_dwani

- Languages Supported
  - Assamese, Bengali, Gujarati, Hindi, Kannada, Malayalam
  - Marathi, Odia, Punjabi, Tamil, Telugu

dwani.ai - Android App

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dwani's Goals

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To integrate and enhance the following models and services for Kannada:

- **Automatic Speech Recognition (ASR)**: To convert spoken Kannada into text.
  a. Listen : Understands spoken Kannada-like a friend who gets you
- **Text-to-Speech (TTS)**: To convert Kannada text into natural-sounding speech.
  a. Speak - Talks back in kannada, naturally
- **Translation Services**: To enable translation between Kannada and other Indian languages.

Workshop - Prerequisites

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- Python 3.10 (mandatory)
- Ubuntu 22.04 (Preferred)
- GitHub Account — GitHub
- HuggingFace Account — Hugging Face
- Fork and clone — https://github.com/dwani-ai/workshop

Workshop Plan

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- Walk through of dwani.ai GitHub Projects for reference

- Build UX with Gradio/Python to explore Use-cases for Voice AI with Kannada + Indian Languages

Kannada LLM Chat

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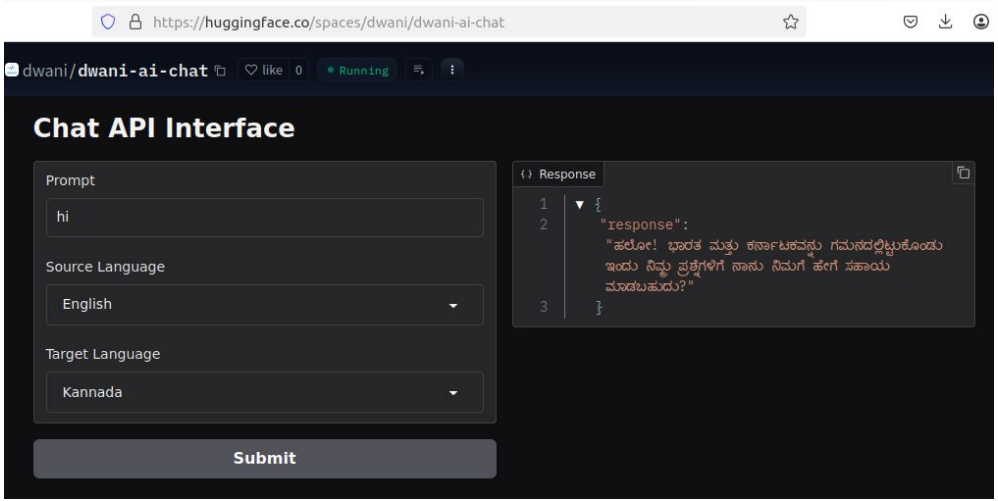
- https://chat-demo.dwani.ai/
- https://github.com/dwani-ai/workshop/blob/main/src/chat-dwani.py



Vision Query

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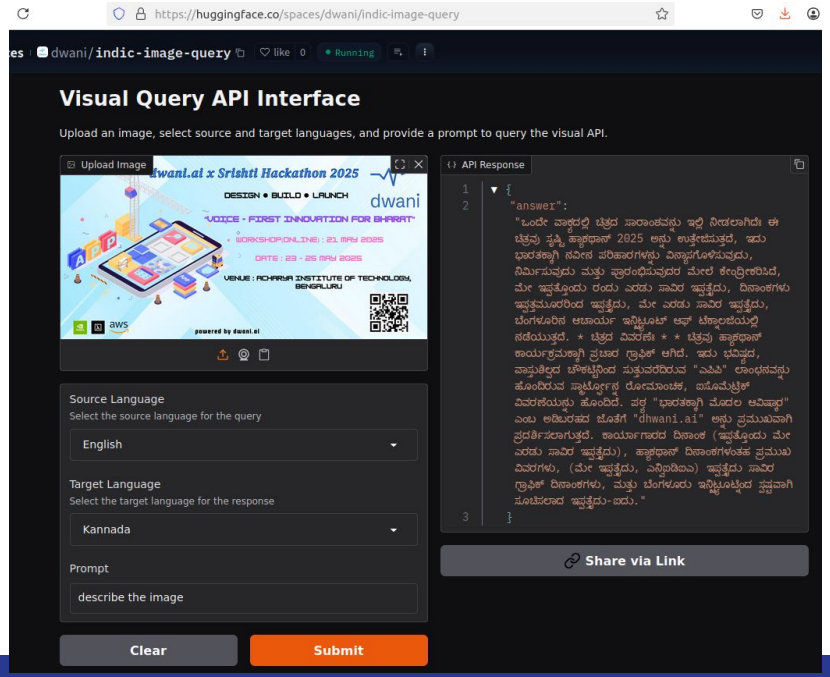
- https://vision-demo.dwani.ai/
- https://github.com/dwani-ai/workshop/blob/main/src/image-query.py



Automatic Speech Recognition (ASR)

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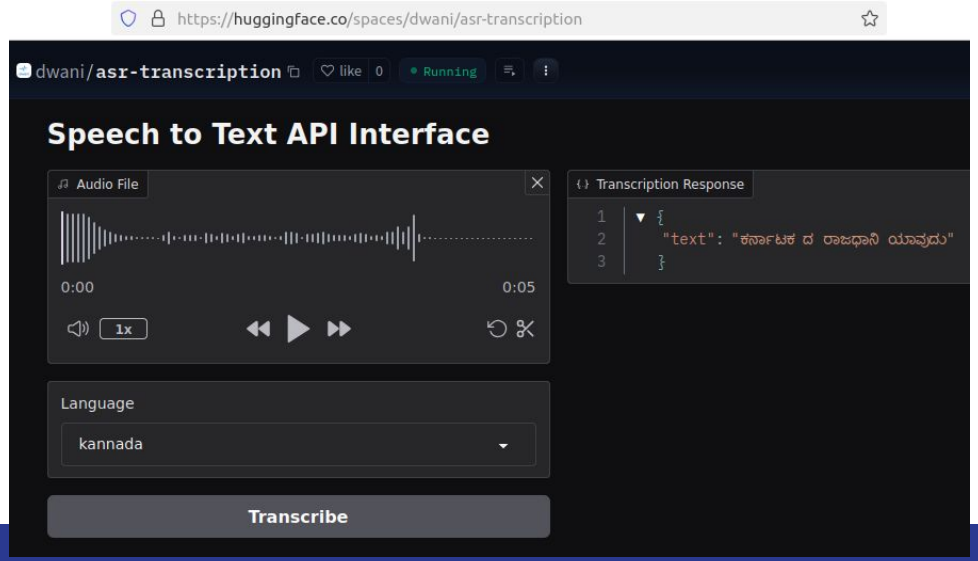
- https://asr-demo.dwani.ai/
- https://github.com/dwani-ai/workshop/blob/main/src/transcribe-dwani.py



Text to Speech

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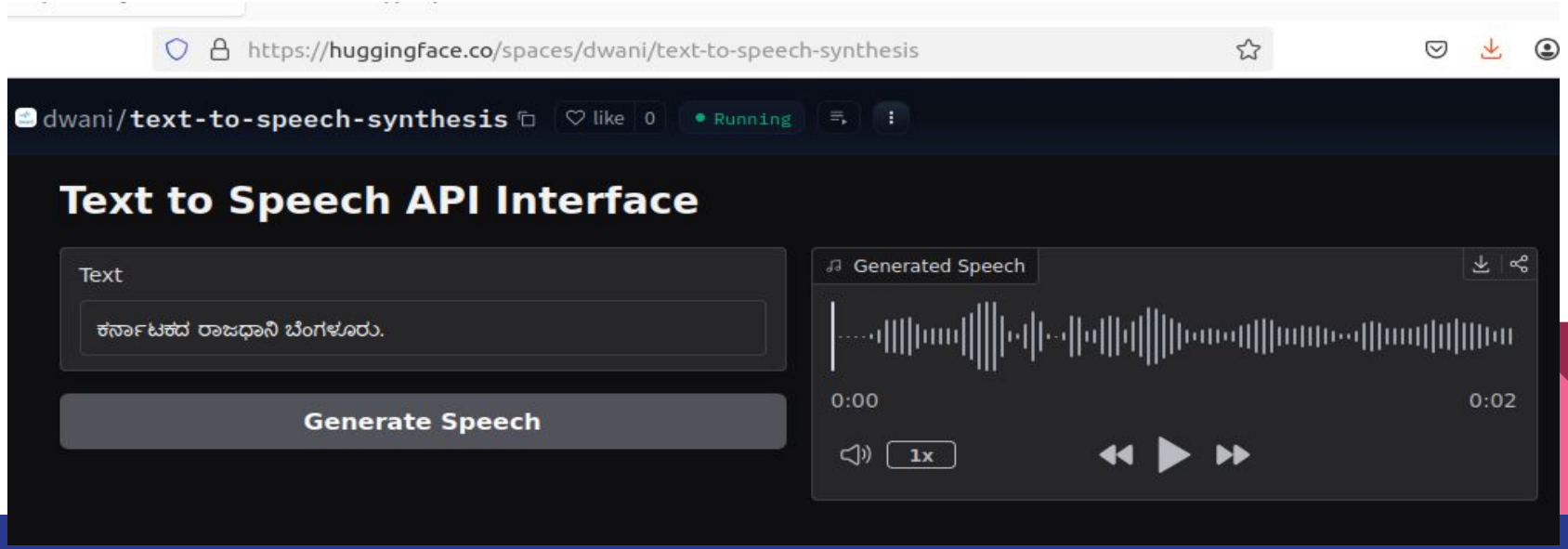
- https://tts-demo.dwani.ai/
- https://github.com/dwani-ai/workshop/blob/main/src/text-to-speech-dwani.py



PDF Chat

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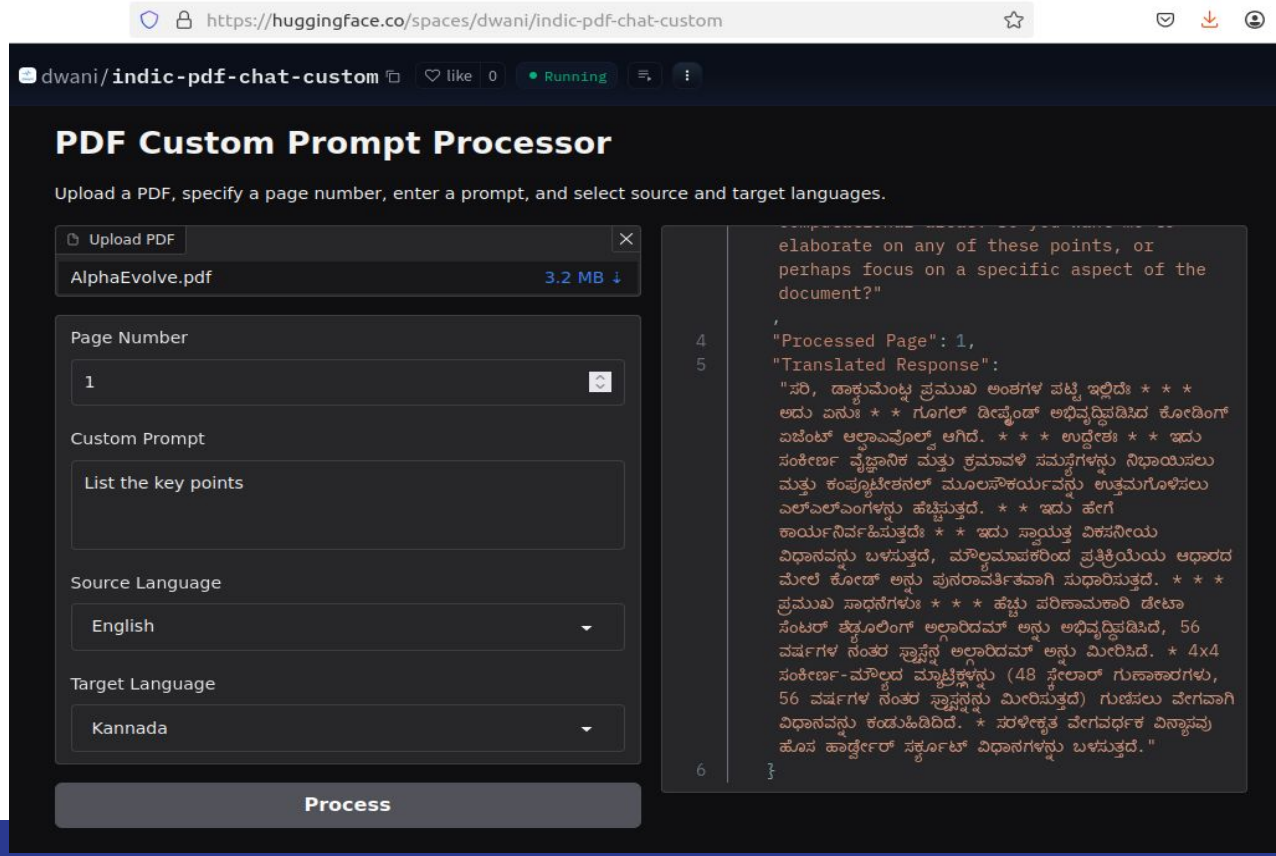
- https://docs-demo.dwani.ai/
- https://github.com/dwani-ai/workshop/blob/main/src/pdf-chat-custom.py



Research Goals / Collaboration

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- Measure and improve the Time to First Token Generation (TTFTG) for model architectures in ASR, Translation, and TTS systems.

Tool	Source
Document Processing	https://github.com/dwani-ai/docs-indic-server
Automatic Speech Recognition : ASR	https://github.com/dwani-ai/asr-indic-server
Text to Speech : TTS	https://github.com/dwani-ai/tts-indic-server
Translation	https://github.com/dwani-ai/indic-translate-server
API Server	https://github.com/dwani-ai/dwani-api-server
Dwani Android App	https://github.com/slabstech/dwani-android

Problem statements - Health

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- Multilingual Symptom Checker
- Voice-Enabled Appointment Booking System
- Health Education Voice Platform
- Assistive Tool for Visually Impaired Patients
- Voice-Driven Telemedicine Connector
- Mental Health Support Voice Bot
- Voice-Based Rehabilitation Guide
- Multilingual Emergency Response Assistant
- Voice-Enabled Health Record Access
- Assistive Tool for Physically Challenged Patients

Problem statements - Public Service and Government

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- Multilingual Grievance Filing System
- Voice-Enabled Public Scheme Navigator
- Transparent RTI Query Tool
- Citizen Feedback Collector
- Voice-Driven e-Governance Chatbot
- Accessible Voting Information System
- Smart Public Announcement System
- Multilingual Legal Aid Assistant
- Voice-Based Public Transport Query System
- Citizen Safety Reporting Tool

Q/A

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- What are your feedback for Workshop ?
- What would you like to build?
- Slides Download - https://tinyurl.com/dwani-ai-workshop