

### **Voice-to-Text script:**

- Automates transcription of trending podcast episodes using OpenAI's Whisper ASR.
- Fetches trending episodes from Podcast Index (based on recent engagement, not just listens).
- Downloads audio and transcribes to text, saving results as JSON files.

### Whisper ASR

- Converts audio waveforms to text transcripts.
- Model sizes: tiny (fast, less accurate), base (balanced), up to large (slowest, most accurate).
- Runs locally, no API needed
- Online APIs (e.g., AssemblyAI) are faster and more accurate but have free usage limits.

### Inputs & Outputs

- Inputs:
  - top\_podcasts.json — podcast metadata (title, description, id, author)
  - top\_episodes.json — episodes with audio\_url, podcast, episode\_title
- Outputs:
  - Audio files saved in audio/
  - Transcripts saved in transcripts/ as JSON

### Process flow

1. Fetch trending podcast episodes list (engagement-based).
2. Download episode audio if not already saved (using yt-dlp).
3. Convert audio and transcribe with Whisper.
4. Save transcript as JSON.
5. Skip episodes if the transcript already exists.