

I began with **fictional names and places**, selecting Azriel, Feyre, and Prythian as test cases.

First Attempt:

- **Azriel** was misrecognized as "*Israel*," with a confidence score of **0.0850**.
- **Feyre** was interpreted as "*Fairy Ralph*," with a confidence score of **0.1441**.
- **Prythian** was correctly recognized as "*Prythian*," with a confidence score of **0.1113**.

Second Attempt:

- **Azriel** was misidentified as "*Azrael*," with a confidence score of **0.0491**.
- **Feyre** was recognized as "*Pharaoh*," with a confidence score of **0.0461**.
- **Prythian** remained correctly identified but with a lower confidence score of **0.0506**.

The most significant recognition challenge was with "*Feyre*," which is understandable. While it can be a real name, its fictional pronunciation follows unique phonetic patterns, making it harder for the model to interpret correctly. Interestingly, the highest confidence score (**0.1441**) was for an incorrect interpretation ("*Fairy Ralph*"), while the correct recognition of "*Prythian*" had a notably lower confidence score (**0.0506**) on the second attempt.

This suggests that due to the fact that the model was not trained on specific fantasy names, its confidence score was low, and its transcription not accurate.

Next, I tested **composer names**:

First Attempt:

- **George Enescu** : {utterance: "George Jones", confidence: 0.0848}.
- **Pyotr Ilyich Tchaikovsky** (initially tested with only the surname): {utterance: "Tchaikovsky", confidence: 0.6321}. When I provided the full name, the model transcribed:
{utterance: "Pyotr in each Tchaikovsky", confidence: 0.0677}.

Second Attempt:

- **George Enescu** was misrecognized again:
{utterance: "Georgia NESCO", confidence: 0.0827}.

Overall, the composers' names were mostly misinterpreted, even though *Tchaikovsky* is a well-known figure. However, I suspect my accent played a role in the recognition errors. English is not my first language, and my native languages influence my pronunciation. This may have contributed to the model struggling with names like *George Enescu* and *Pyotr Ilyich Tchaikovsky*, particularly when I pronounced the full name with a slightly different accent than a native English speaker.

To further test how accent affects ASR performance, I revisited "*Prythian*". In daily conversations, I tend to pronounce it with a *t* sound instead of the *θ* (th) sound. When I spoke it naturally, the model performed worse: {utterance: "Prytian", confidence: 0.0676}.

This experiment reinforces the idea that while ASR can be a valuable tool, it may not be equally effective for speakers with accents that differ from the model's training data.

A-VG

After training the model with texts and audio containing the words I previously struggled to transcribe, the confidence scores increased significantly. More importantly, this time, the model correctly transcribed the words.

{utterance: 'Feyre', confidence: 0.59265244}

{utterance: 'Azriel', confidence: 0.4891711}

{utterance: 'Prythian', confidence: 0.7729523}

{utterance: 'George Enescu', confidence: 0.6426214}

{utterance: 'Pyotr Ilyich Tchaikovsky', confidence: 0.68486756}

EndPoint ID: a54e7f4a-a261-42ab-a92b-b9537ab47e2e