## Al Talkmaster – Al conversations for script-based metaverses like OpenSimulator

Al Talkmaster (aiT) is a system for building characterful conversations, debates and theatre plays with multiple participants. aiT conversations are available for listening as web streams and can be streamed to parcel audio in OpenSimulator. aiT is opensource and can be used with opensource large language models or the OpenAl API.

## Components of aiT

- communicate with aiT server from OpenSim
- provide configurations for characters and conversations in aiT

LSL Scripts



- conversation server
- •interacts with Ilms to generate chat content
- uses Kokoro or OpenAl to generate audio files

aiT Server



- •generates an audio stream from the generated audio files
- •streams to Icecast for broadcasting



## **Information for Users**

You can create conversations with AI characters using aiT. The characters can be configured to use specific models and have custom instructions. This shapes the characters' behaviour and the resulting conversation. Use the provided LSL scripts or your own scripts to create responsive characters. The provided scripts require certain notecards for the aiT character configurations. The demo directory shows an example configuration for a conversation with 2 AI characters Vladimir and Estragon.

aiT characters listen to in-world messages. Mentioning a character causes the script to send a message to the aiT server. The server then calls a large language model to generate the character's response and audio. The character polls the server for the generated response and replies with the response in-world.

The messages can be made available for listening in-world using parcel audio.

## Running your own aiT server

The aiT server is written in python, we recommend using docker for running your own server. The aiT server is a middleman between the LSL scripts and the large language models. It tracks the conversation history and also generates the messages and audio files using large language models and audio services. aiT does not come with inbuilt models but can be configured to use opensource models (e.g. Ollama) and the OpenAI API.

While the aiT python server has the capabilities of serving the audio files as a stream directly, Icecast and Liquidsoap provide higher audio quality and reliability for streaming audio to OpenSimulator worlds. Liquidsoap generates an audio stream from the generated audio files and relays it to Icecast. Liquidsoap and Icecast can be hosted easily using docker as well.