Aaron

George Zeng,
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Gruvbox inspired theme
Team

Anugrah and George
Rising Seniors from University High school

Interests:
Computer Science and Engineering.

Why Interested?
Engineering and computer science both involve creativity like any art, however it is bounded by physical reality, making it a creative yet intellectually stimulating field to work in.

Most importantly it pays very well.
Describe your Voice Assistant

What you built:

- Initial setup:
  - Operates entirely on Raspberry Pi 4 OS (Debian)
  - OpenAI Whisper or Google Cloud Speech-To-Text
  - OpenAI ChatGPT input as user speech
  - OpenAI ChatGPT response as text
  - Text from OpenAI ChatGPT to Audio through OpenAI Text to Speech
- OS(Operating System) change
- Localized speech to text for faster response time – Utilized CUDA Cores
- Utilized a different API for text to speech
- Custom Voice
- Customized voice emotions
- Devil’s advocate mode
How you built it

1. Installed OpenAI Whisper Locally on a Windows System
2. Developed custom functions for interaction with OpenAI ChatGPT API
3. Trained Text to Speech AI on 5 minutes of Data and implemented custom functions for playing audio once.
Details and Potential Improvements

Experience:
- CUDA Cores
- Anaconda
- Localization of OpenAI Whisper

Unsuccessful Idea: Wireless Mini controller with a physical audio input toggle
- ESP 32 using Arduino IDE
- Was able to setup Arduino Nano ESP32 micro controller individually and connect to WiFi (Bluetooth speeds are too low)
- Failed at transferring raw audio data live due to difficulties with microphone input
Thank you