

Project Goal:

To create an autonomous virtual assistant designed to effectively welcome and guide school visitors and students through natural oral conversations

Project Description:

A virtual AI assistant that can detect and recognize individuals, engage in natural oral conversations with users, and use speech recognition, speech diarization, and other features to identify the person it is interacting with

ML Components

- Object Tracking
- Object Distance
- Face Detection
- Face Recognition
- TTS & STT
- Open AI LLM
- Speech Recognition

Future Work:

- Improve face recognition over far distances
- Improve speaker diarization
- Improve speech recognition
- Improve sound prioritization
- Expand dataset & add Concordia info.

```
user      Hello.
                                                1:48:07 PM
assistant Hi Kim Chanyoo! I'm your AI assistant—here to help with anything you need. What can I do for you today?
                                                1:48:08 PM
user      Where is Concordia, Hanoi located?
                                                1:48:12 PM
assistant Concordia International School Hanoi is located in the developing area of Dong Anh District, northeast of
Hanoi's city center. The exact address is Van Tri Golf Compound, Kim Nỗ Commune, Đông Anh District,
Hanoi, Vietnam. It's about a 20-30 minute drive from the Hoan Kiem Lake area, depending on traffic. The
school is in a quieter, suburban setting with spacious grounds, away from the busier downtown districts. If
you need directions or transport tips, let me know!
                                                1:48:15 PM
```



Demo Video