

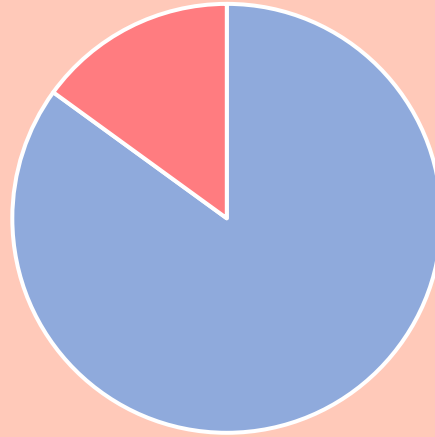
Virtual Girlfriend

Why?

Benefits of intimate relationships:

- Decrease stress level
- Sense of well-being and purpose
- Promote healthier behaviors
- Improve longevity

(Northwestern Medicine, 2020)



HKUST Student Body Gender Ratio

■ Male ■ Female

solution:

Virtual Girlfriend!

Just get a real girlfriend!

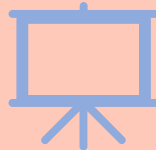
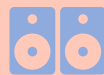
But...

- Too busy with studies to date
- Too ugly to get a girlfriend
- Difficulty in finding a partner
- Your girlfriend may cheat on you

Overview



AI backend hosted
on the cloud



mobile app

live interaction suite

- holographic projector
- microphone
- motion sensor
- speakers

Holographic projector

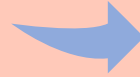
plexiglass screen



projector



projector



holographic projection

Live interaction suite



- microphone and motion sensor capture user speech and body gestures
- reply generated using language generation and voice synthesis

allows for live conversation with Virtual Girlfriend!

Personalization

Appearance

1. Train a Generative Adversarial Network (commonly used to generate art nowadays) to generate artwork of 2D anime girls.
2. Users specify preferences for various features such as hair and eye color
3. Unique and personalized 2D anime girl generated for every user!

Voice & personality

Similarly, a GAN can be used to generate voices and personality combinations.

Example personalities:

- cute
- mature
- tsundere

Example voices:

- warm
- clear
- sweet

the possibilities are endless!



examples of GAN-generated anime girls (source: Waifu Labs)

Possible further applications: Virtual Boyfriend, Virtual Friend, Virtual Assistant, Virtual Teacher, etc!