So, our group's project is Gesture Recognition based on PyTorch. I am Haocong Wang and our group members include Runlin Hou, Sifan Yuan and Yuxiang Song.

First, please allow to introduce some background and application of gesture recognition. Gesture recognition is a topic in computer science, mainly talking about making computers recognize human body movements. It can be captured from all parts of human body, but it mainly comes from faces and hands. And our project focuses on hand movements. Gesture recognition is a vital approach to make the direct communication between human and computers achievable without extra mechanical devices compared to primitive text user interfaces and traditional GUI.

Gesture recognition has a broad range of applications in human-computer interaction. For example, in virtual reality and augmented reality, gesture recognition can be applied widely. Also, in the smart home domain, gesture recognition can be utilized to remotely control smart appliances and home robots. It can be conducted with techniques from computer vision and image processing.