

# AR-Acupoint : Illustrating Acupoints on Own Face with Augmented Reality Technology

Michael Wai Yeung CHUNG<sup>1</sup>, Lilian Ka Yin LO<sup>1</sup>, Wai Kai WONG<sup>2</sup>, Rebecca Kit Ying LEE<sup>2</sup>,  
Sam Hong Kit POON<sup>2</sup>

1. School of Chinese Medicine, Faculty of Medicine, The Chinese University of Hong Kong

2. School of Biomedical Sciences, Faculty of Medicine, The Chinese University of Hong Kong

## Introduction

**Face acupoints** are the specific sites where needles or finger pressures could be applied for health-keeping or therapeutic purposes according to the Chinese Medicine Theory. While teaching of these acupoints are usually demonstrated with student models limitedly in classroom, our team explored the use of **Real-time Face Augmented Reality (Face AR) technology** to allow self-learning of face acupoints with the own face of the learner.

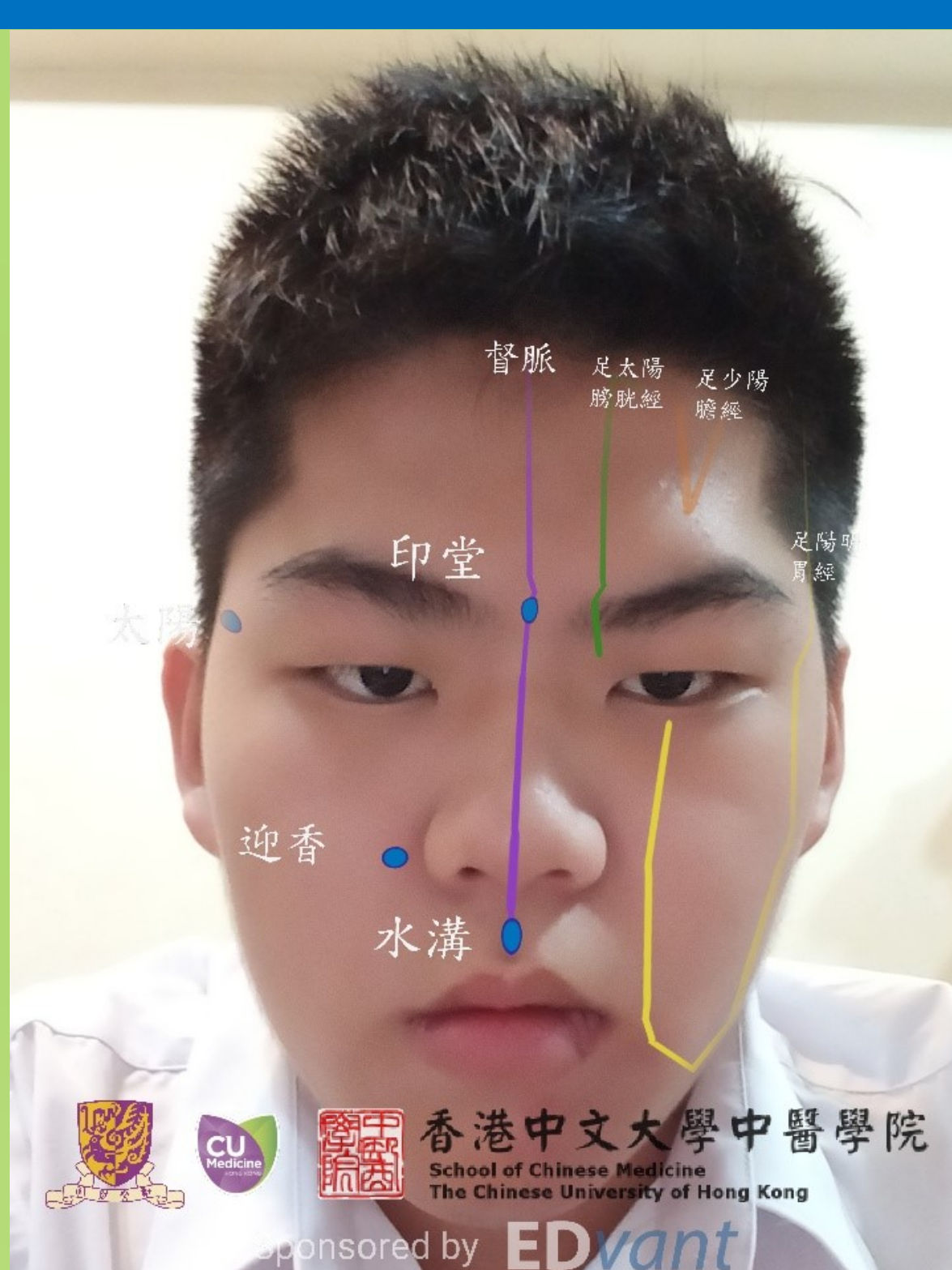
## ARAcupoint - The prototype digital face mask

A prototype **digital face mask** with learning contents including 4 face meridian lines and 4 acupoints are built to verify this idea. Students can view the mask with **Snapchat**, a social media app. Some secondary school students with no prior knowledge in acupuncture, and Chinese Medicine major students who are practicing acupuncture, were invited for trial of this tool.

## Experience of Secondary school students

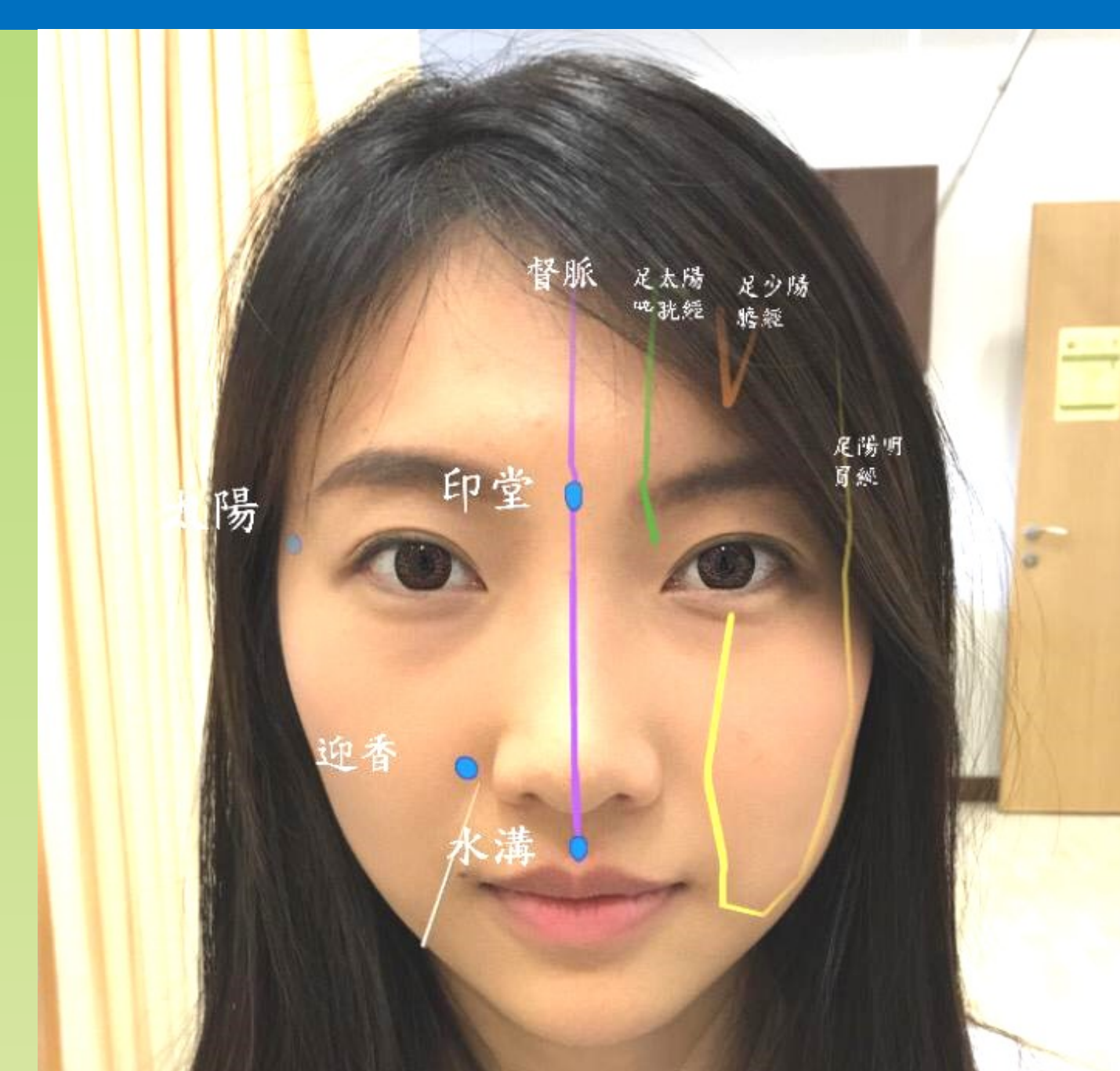
Secondary School Students who have no prior knowledge were taught with face acupoint massage and found this tool :

- Attractive and user-friendly interface
- Acupoints could be easier with own face than other models
- Willing to share their selfie with acupoints for self or peer learning



## Experience of Chinese Medicine Major Students

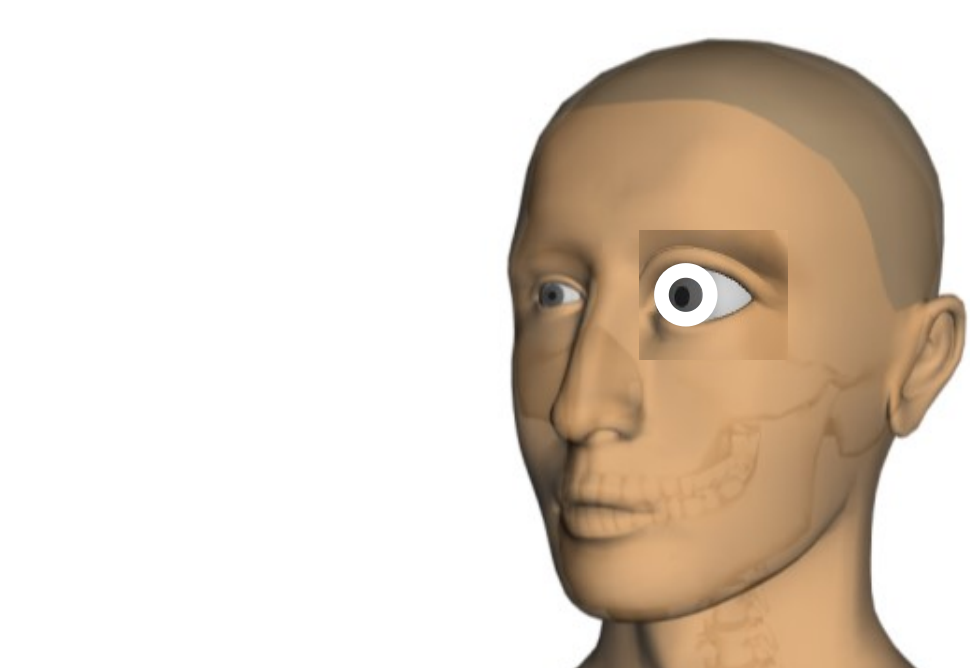
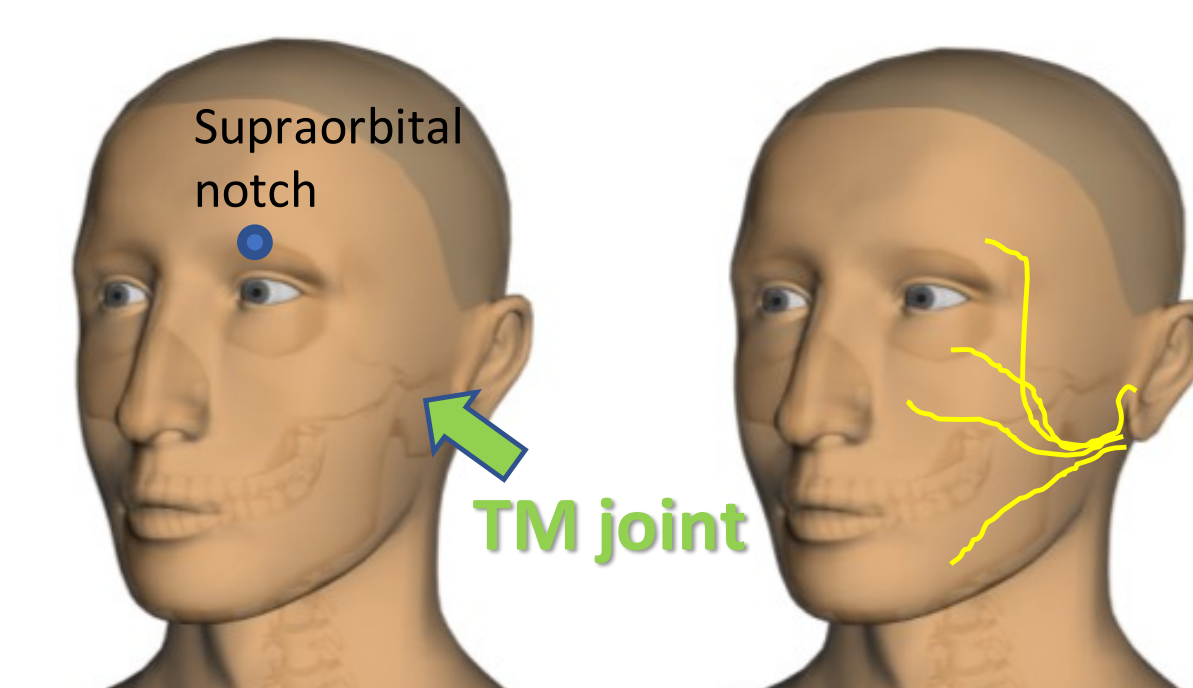
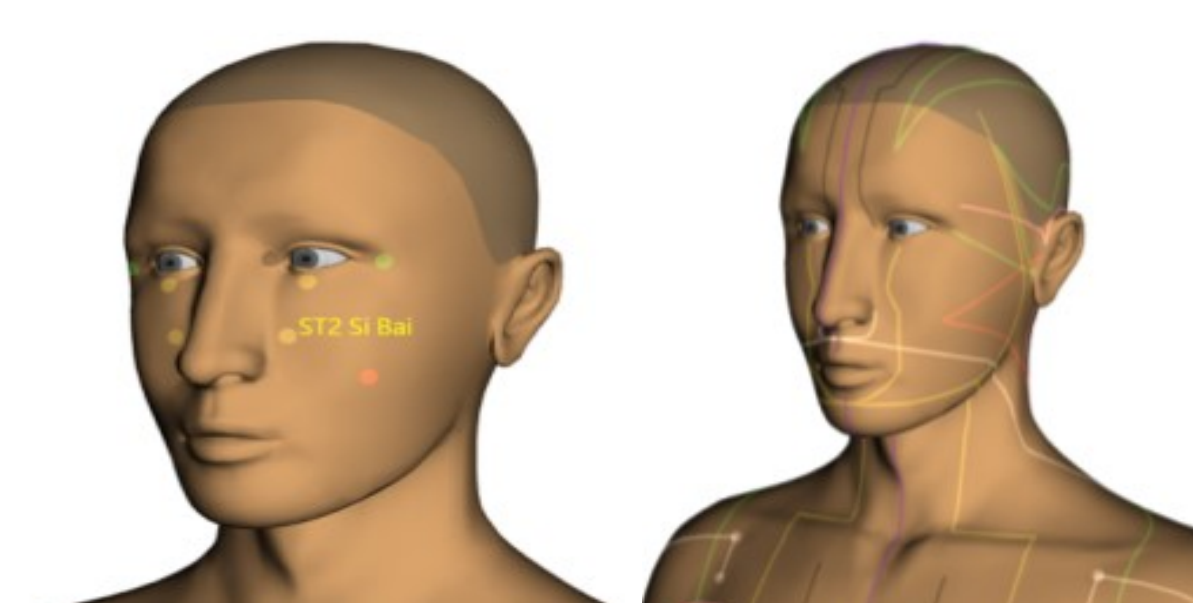
The Chinese Medicine students who were practicing Acupuncture found that, in addition to the revision purposes, the tool can be used in different viewing angles and may help to check whether the needles are inserted accurately and matched the point as shown in the face mask.



## Further ideas

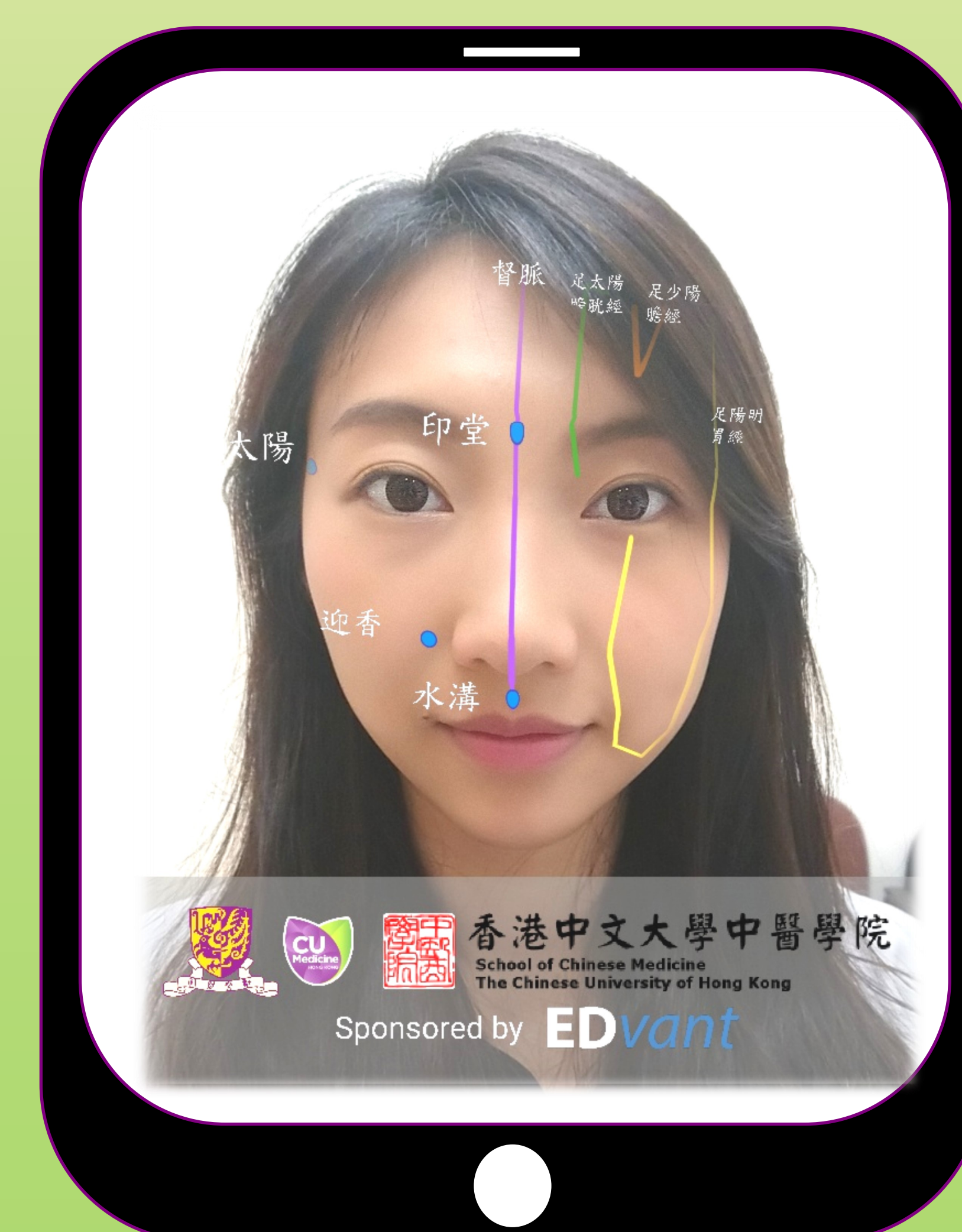
This pilot project shows that the learning content based on Face AR technique could enhance self-learning of both general public and professional students.

Our team is exploring further possibility to include more face related learning contents from various disciplines, such as the anatomical structures of the face including muscles, nerves or clinical symptoms that are presented on the face.



### Possible Applications

1. Chinese Medicine
  - Acupoints for face massage
  - Meridian lines
2. Anatomy
  - Palpable bony landmarks
  - Muscles
  - Nerves & dermatome (Facial nerve, Trigeminal nerve)
  - Temporomandibular (TM) joint movement
3. Pathophysiology and Clinical symptoms
  - Graves' eye (bulging eye)
  - Bell's palsy (drooping face)



## User Trial

Please scan the QR code for detailed instructions. (In Chinese)

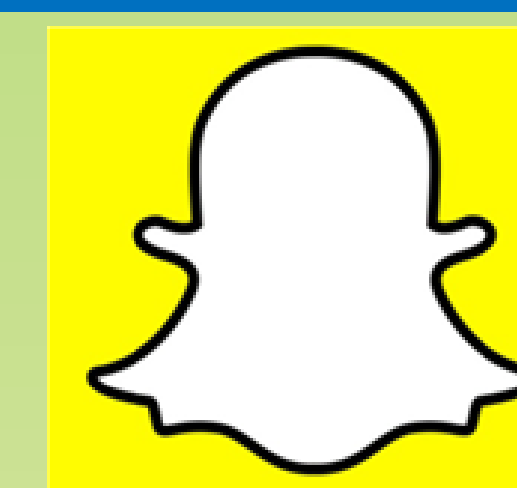


1. Download **Snapchat** App and complete registration
2. Launch Snapchat app, scan the **Snapcode** by pressing and holding to load the mask.



## Technical Information

**Snapchat** is a social media app which provides custom made face mask.



**Lens Studio** by Snap Inc. is used for the creation of face mask.

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## Contact us

**Mr. Michael Chung**

School of Chinese Medicine  
Faculty of Medicine  
The Chinese University of Hong Kong  
micchung@cuhk.edu.hk