AR shoe Try-on

Long Pan 21332147

Zhiqiang Cheng 22322639

## Introduction

This project is about the application of AR shoe changing. Users can access to the webpage using their mobile phone, then place their feet within the camera's shooting range, and then automatically adjust the size of the model shoes based on their foot size. Different 3D shoe models are provided for users to freely choose and match. We hope to reduce the time for users to go to offline physical stores to choose the appropriate size and style through this application, allowing users to use AR to try on and view the style and wear effect of shoes anytime and anywhere.

## Approach

We decided to use DeepAR studio as our design and development software. DeepAR is the first successful model to combine deep learning with traditional probabilistic forecasting. DeepAR studio is a sdk which allow developers to create different kind of AR software, a platform for AR asset creation within DeepAR SDK that gives you the toolkit to create effects driven by face motion, expression & body movement.

Meshroom and Unity will be used to import shoe’s 3D model.

## Test Data

We decide to use the shoes of classmates and ourselves as the model data, through meshroom to create the texture and model and modify them in Unity.

## Outcomes

We hope that this software can be successfully used on the entire platform and ultimately generate models of appropriate size for different foot sizes. And it is possible to feed back the size of the foot into the system, so that in the future, it can be filtered and matched based on the shoe size of the existing warehouse.