# MIRA: Virtual I

Introduction

Mira is a portable smart device which can give users try-on experience for online shopping, The inside camera can capture the real-time image of the users, the users can see themselves on the wall or any projector screen through the projector. It likes a mirror, but it also can let users try different online clothes or items.

Why Mira?

- Brand new experience for online shopping
- Affordable (Low price, can be a new smart home device)
- Portable (small cube box, save space, easy to install)
- Save money and time on returning unsatisfied items
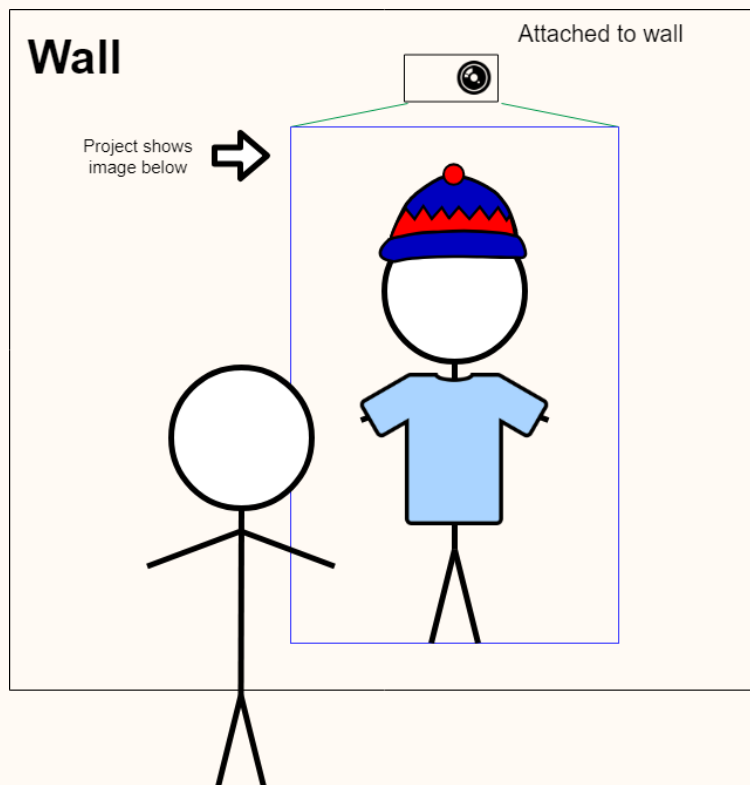
System

- Camera capture ima
- Processing the imag microcontroller
- Detecting the huma
- recognize the skelet human body
- Turn the 2D skeleta
- fetch 3D clothes mo shape
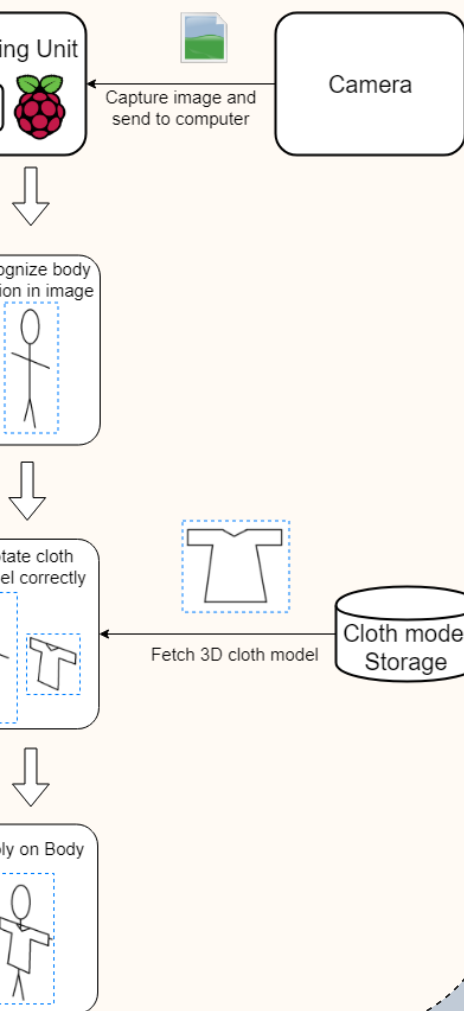- Projecting the outpu through Projector
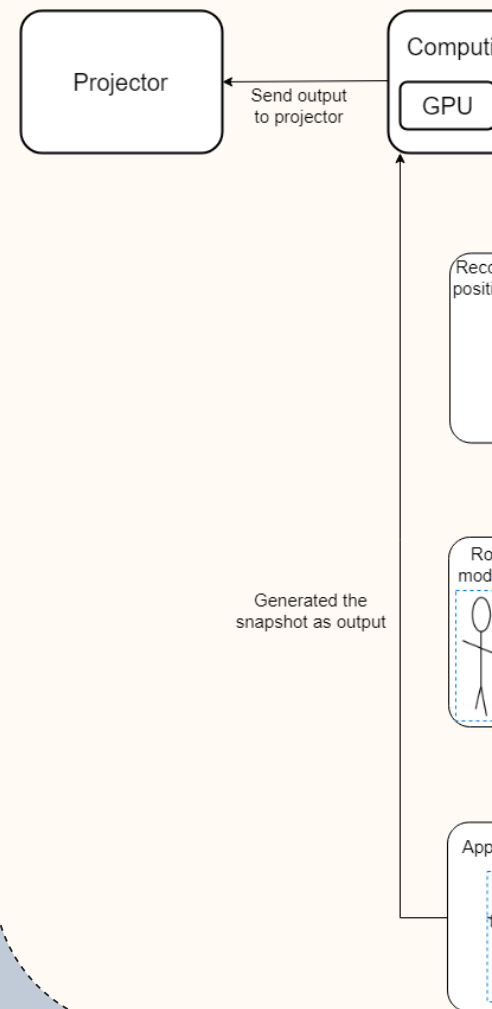
Design

age as an input
through the

n-body in the image
tal structure of the

structure to 3D model
del based on the body

ut image on the wall

Future Work

- Apply the ESSEF Found at beginning of next semester
- Integration of camera, projector, and the software
- Design voltage converter module to simplify the power adapter
- Implement 3D cloth model generation feature
- Improve body recognition algorithm for accuracy
- Implement mobile application to control the device
- Test and verify the prototype design based on the test plan

Conclusion

Our proof of concept model is able to recognize body motion in state-of-art accuracy. The POC will be demo from our laptop to show you the result we generated from a image, and how the 3D model move as user's pose is changed

Contact information

Company: FAIR

CKO: ALEX
CEO: EDEN
CTO: NICK

Cantact: Alex (xinweiz@sfu.ca)