

• Motivation

- Happy Visitor = \$\$\$
- Common pain-point = finding unsatisfied customers
- Staff unwilling, expensive, unreliable to perform such service



• Steps

- Develop bluetooth communication between rPi3 and Android phone
- Develop openCV to detect negative emotions on faces
- Develop engagement and reporting algorithm based on emotion data from Realsense
- Develop exploration algorithm to find visitors (and not crash)

• Solution

- Autonomous Emotion Detection Robot
 - Mount a realsense on an Ollobot
 - Perform emotion recognition on visitors
 - Autonomously explore, report, engage



• Team Members

- Minghan Wei
- Blake Hament
- Frank Mascarich

