

Robots have traditionally been used in very specific settings where they primarily interact with trained professionals and perform specific actions. As robots find their way into our households and daily lives...

INTRODUCTION

FACE TRACKING

SIM is able to appear attentive and interested in interactions by orienting itself to the user.

EMOTION RECOGNITION

SIM can recognize emotions by analyzing the user's facial expressions in real-time.



ABOUT SIM

RESEARCH

From existing research, we synthesized the Social Interaction Model (SIM) to govern the robot's behavior.

DESIGN

We sketched character designs and created a virtual 3D model to test different expressions and motions.

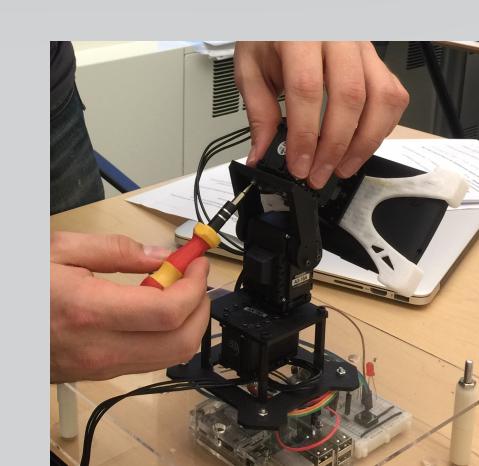
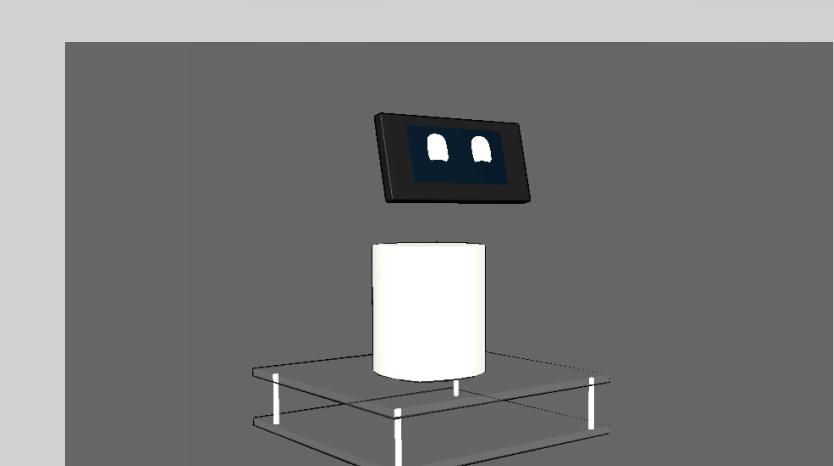
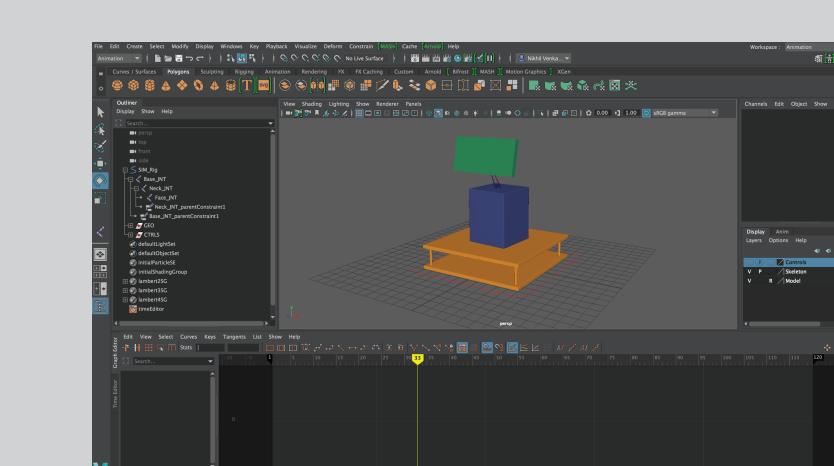
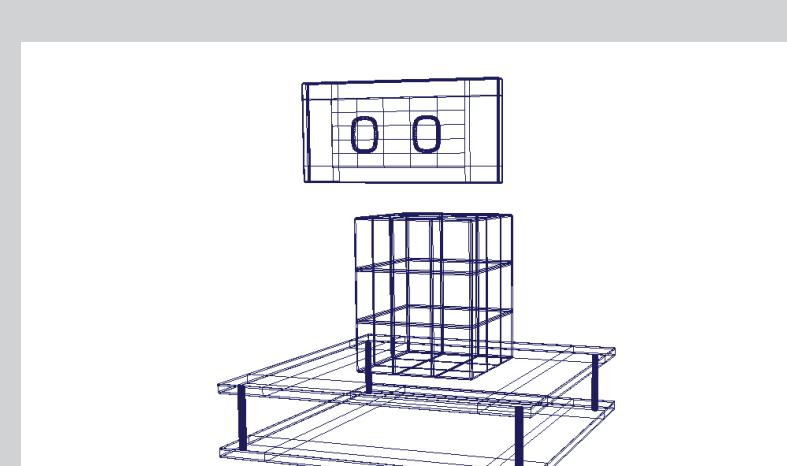
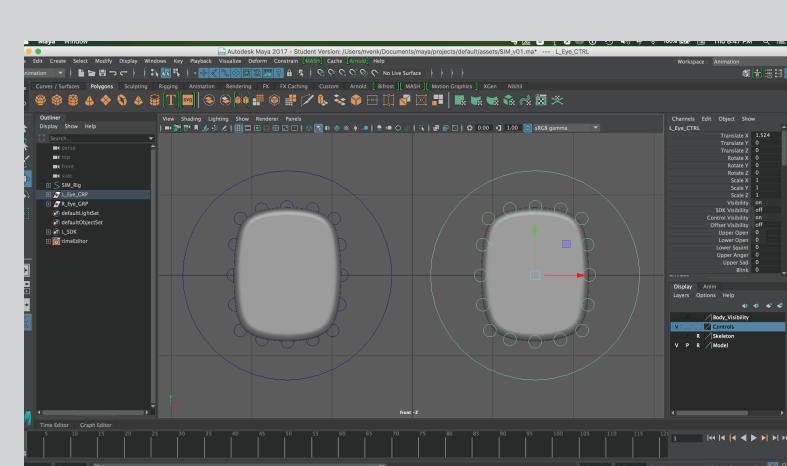
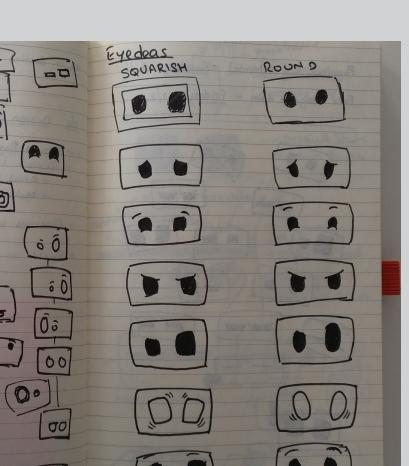
PROTOTYPE

We exported the animations to a physical prototype built using stock motors and custom 3D-printed parts.

TEST

Two versions of SIM were put in front of users to validate and test the effectiveness of the Social Interaction Model.

APPROACH



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