Beta Presentation
Adjust: Augmented Reality Chair
Adjustment Assistant
The Capstone Experience
Team Herman Miller

Mike Bremiller
Kevin Gaban
Han Huang
Kyle Kinsey
Jacob Weber

Department of Computer Science and Engineering
Michigan State University
Spring 2018
Project Overview

• Augmented Reality Adjustment Assistant for users of Herman Miller Chairs
• Identifies model of chair using smartphone camera
• Guides users through ergonomic adjustments
  ▪ Interactive 3D model highlights relevant part
  ▪ Tapping on highlighted part gives adjustment video and instructions
• Designed to replace paper instruction manuals
System Architecture

- Microsoft Custom Vision
- Trains
- CoreML Model
- Swift
- 3D Assets
- Apple SceneKit
- Firebase Analytics

The Capstone Experience
Team Herman Miller Beta Presentation
Chair Detection Interface

Scan Chair

Detecting Chair...

Chair Detected: Embody

Adjust Chair
Interactive Adjustment Interface

Getting Started...

Sit all the way back in your seat.

Make sure your entire back is making contact with the backrest.

Let's Go!
Adjustment Information Screen

PostureFit SL Adjustment

Knob on right or left side on back of chair
your spine and provides lower back comfort

To Engage: While seated, turn knob forward until you find the support that feels right for you.

To Disengage: While seated, turn knob backward.
Main Menu

Gallery
Select from our gallery of Herman Miller office chairs.

Camera
Use your phone’s camera to detect your Herman Miller chair.

About Us
Learn more about Herman Miller and our range of products.
Firebase Analytics Dashboard
What’s left to do?

• Continue expanding analytics
• Testing and bug fixes
• Minor UI tweaks
• Final documentation and code cleanup
Questions?