

# Gesture-Enabled System Interaction (GESI)

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# Project Goal

**Develop a user-friendly end product that allows users to interact effectively with devices based on intuitive hand gestures.**

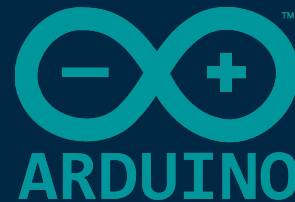
# Journey to Completion

PATH

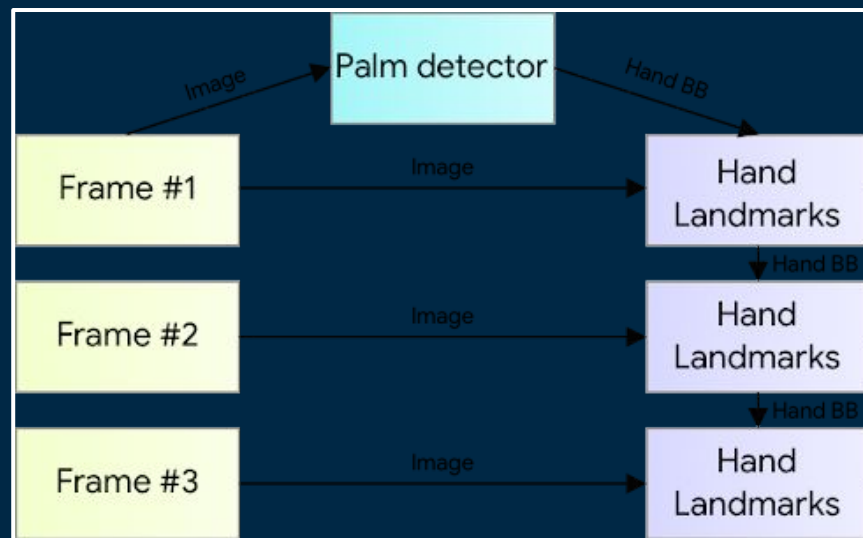


- **Design 3D-Printed Hardware**  
Mount the ESP-EYE on for First Person View
- **Link Gestures -> Commands**  
Utilizing Alexa's smart home device framework
- **Train and Develop Gesture-recognition**  
Develop the gesture recognition algorithm via MediaPipe

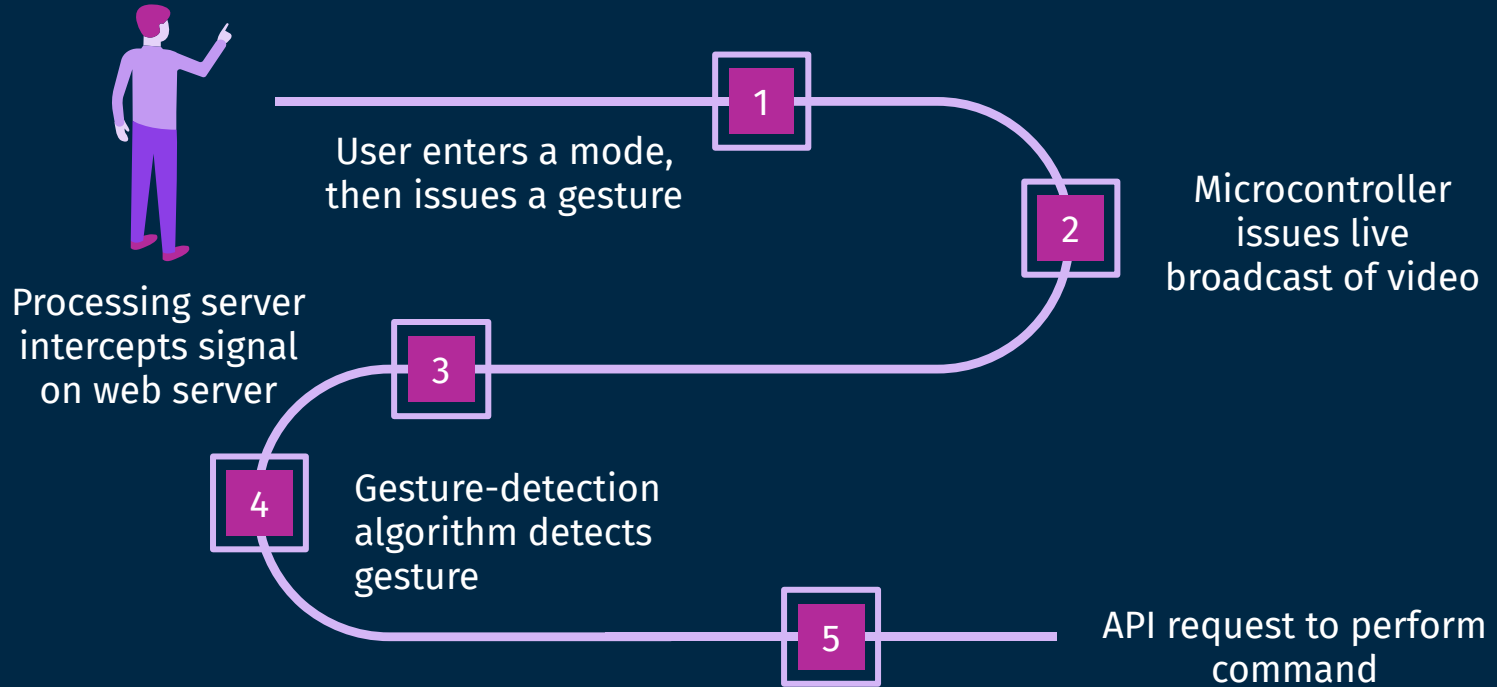
# Technical Specifications



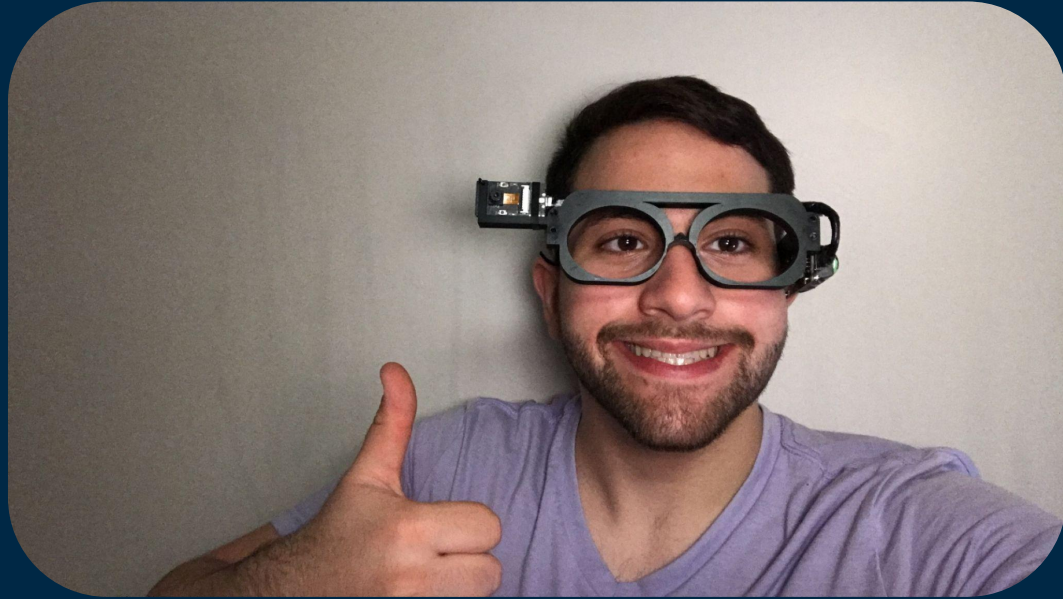
# Hand-Tracking Solution



# Technical Process



# 3D Prints



**DEMO TIME**

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# Gesture Tracking



# Smart Home Mode



# Smart Home Mode



# Music Mode



# Presentation Mode



The background is a dark blue field decorated with various geometric elements. There are numerous small squares in shades of teal, orange, and pink, some of which are solid and others are hollow. Thin white vertical lines of varying lengths are scattered across the composition, creating a modern, minimalist aesthetic.

# THANK YOU!

Questions? Comments?