Infrared Motion Sensor Smart-Home Integration

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Project Overview:

I will be developing a system to mimic the universal studios wand interactions for personal use in a smart home system. Technology could be achieved through different methods, but the result would be allowing a physical motion with a "wand" to run commands interfacing with physical tech or google smart systems.

Sprint 1:

-Recognize and differentiate specific motions

-Get commands to activate various smarthome systems

-Use commands to run pc programs

Sprint 2:

-Create a system to connect motion input to commands

-Experiment with commands to activate physical motors?

Technologies and Tools:

-"Wand" (IR reflector, motion sensor, wii remote, etc.)

-Receiver (camera setup, sensor bar, etc.)

-Raspberry pi

AI Tools:

Learning with AI

- Using AI to learn about the problem domain technologies
- Checking code for mistakes/alternative techniques

AI Integration

- Potentially using AI for image recognition to detect unique motions

Github Repositories:

Project Repo: https://github.com/ColaTonic/CSC494_Project/tree/main

Learning with AI Repo:

https://github.com/ColaTonic/CSC494_LearningWithAI/tree/main