Gaze Tracker:

Mapping and Shaping Attention during ODYSSEY

Description

Gaze Tracker is a device that tracks and maps gaze directions while commuting. By analyzing head position and mapping it to a 3x3 visual grid, it helps users identify gaze pattern. The device provides real-time feedback to encourage users to engage more attentively with their surroundings.

Attentional Theory

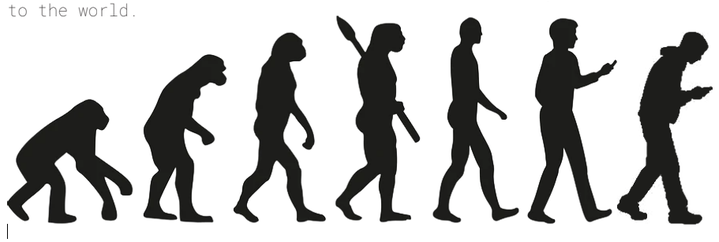
Attentional Disconnection in the Modern Age
In the past, before screens dominated our lives, commutes encouraged observation and exploration. Gaze patterns were varied, directed outward toward the environment rather than downward. Over time, the rise of devices has reshaped muscle memory and attentional habits, resulting in a predominant downward gaze. This project seeks to undo these patterns, reteaching attention as a deliberate and interactive practice.

Attention as a Fluid Process
Attention is a fluid and deeply habitual process, often flowing unconsciously and shaped by environments, tasks, and internal states. This project explores the interaction between people, urban spaces, and technology, focusing on how screens affect bodily and mental engagement with the world. Technology has reshaped individual behavior during commutes, often leading to disconnection from surroundings and a shift in attentional habits.

Intervening with GazeTracker
GazeTracker intervenes in this unconscious habit by creating a feedback loop that encourages intentional focus. By tracking gaze patterns on a 3x3 grid and logging time spent in different zones, it highlights habitual downward gazing and its impact. The device provides real-time feedback to redirect attention, prompting engagement with surroundings.

Attention as a Trainable and Moldable Process
Attention is imagined as both a muscle and clay—trainable through exercise and moldable through repeated awareness. Each notification serves as a reminder to look up, actively reshaping my relationship with the environment. Through this feedback system, GazeTracker fosters a playful yet disciplined approach to attention, blending technology and urban spaces into a partnership for cultivating spatial awareness and curiosity.

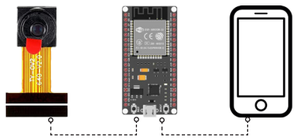
Reawakening Curiosity and Connection
This project envisions attention as a dynamic and trainable process, where deliberate interventions can reawaken curiosity and connection to the world.



Part A: Tracking and Mapping Gaze Directions

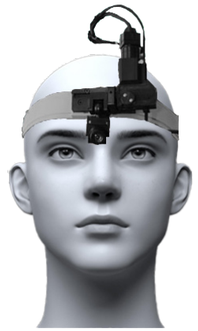
Objective :

Understand where users direct their gaze while commuting.



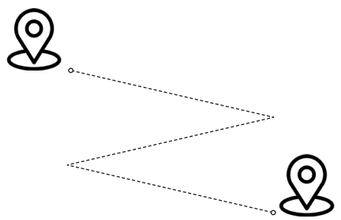
STEP 1:setup

setup the circuit between camera,esp 32 and phone



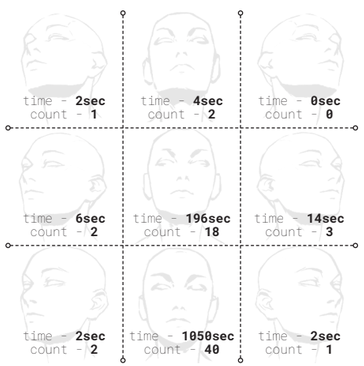
STEP 2:wearable

setup the wearable headbang with ESP 32 camera mounted on head as action camera giving your live POV.



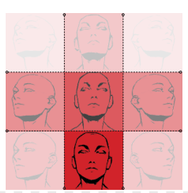
STEP 3:Commute

Going on a commute from point A to point B in natural behaviour.



STEP 4:
Map the gaze grid

Going on a commute from point A to point B in natural behaviour.



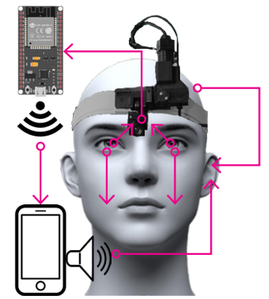
STEP 5:observation

Observation the stats and conclude the gaze pattern

Part B: Real-Time Feedback System

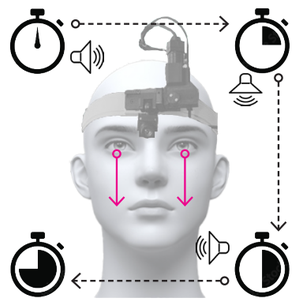
Objective :

Intervene in habitual gazing to encourage intentional focus and spatial awareness.



STEP 1:setup

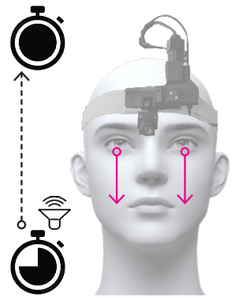
setup the parameters of gaze pattern



STEP 2:condition break

timer starts when you break the condition.

Beep 1 - timer 1
Beep 2 - timer 2
Beep 3 - timer 3



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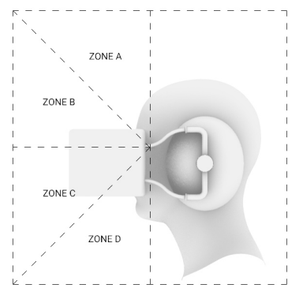

STEP 4:threshold

gaze covered after multiple alerts