

(Greek mythology) the Godess of sight and vision





## Visual Impaired in the U.S

#### But we barely see them. Why?







#### Visual Impaired in the U.S

Do not leave their homes.

![](_page_2_Picture_4.jpeg)

# 

![](_page_2_Picture_6.jpeg)

01.

## Limited supports

![](_page_3_Picture_3.jpeg)

#### Volunteer to visually impaired ratio.

![](_page_3_Picture_5.jpeg)

## 

![](_page_3_Picture_7.jpeg)

02.

## Limited tools

![](_page_4_Picture_3.jpeg)

![](_page_4_Picture_4.jpeg)

![](_page_4_Picture_5.jpeg)

![](_page_4_Picture_6.jpeg)

![](_page_4_Picture_7.jpeg)

02.

## Limited tools

![](_page_5_Picture_3.jpeg)

80% Navigation ends

100% Destination

![](_page_5_Picture_6.jpeg)

![](_page_5_Picture_7.jpeg)

## **Navigation App** Can't reach the last 10 feet

![](_page_5_Picture_9.jpeg)

#### White Cane

Absolute Safe range is too small

![](_page_5_Picture_12.jpeg)

![](_page_6_Figure_1.jpeg)

![](_page_6_Picture_2.jpeg)

Self Actualization

Esteem

Love & Belonging

Safety Needs

Physiological Needs

![](_page_6_Picture_8.jpeg)

#### ATTRIBUTES | USER EXPERIENCE

#### EMPOWER CONFIDENCE

Using technology to give power to user by helping them acheive better vision.

#### SOCIALLY INCLUSIVE

Helping user to get back into the society with minimium stigma caused by vision impairment.

#### SAFELY RELIABLE

Creating a device safe enough that users could confidently rely on.

#### SEAMLESS INTEGRATION

Designing a device that could be seamlessly and easily intergrated with user's existing lifestyle.

![](_page_7_Picture_9.jpeg)

![](_page_8_Picture_0.jpeg)

![](_page_8_Picture_1.jpeg)

![](_page_9_Picture_0.jpeg)

## ----> Data Input

![](_page_10_Picture_1.jpeg)

THIEA MOBILITY

![](_page_10_Picture_3.jpeg)

![](_page_10_Picture_4.jpeg)

THEIA leverages AI to detect and identify objects while learning user habits and frequently visited locations to enhance daily mobility. It goes beyond traditional navigation apps by recognizing real-time, detail-specific elements—such as whether a door is sliding or swinging, its direction of movement, or the placement of a handle. THEIA also handles complex visual recognition tasks that a white cane cannot, like reading road signs or interpreting dynamic obstacles.

![](_page_10_Picture_6.jpeg)

![](_page_10_Picture_7.jpeg)

![](_page_11_Picture_0.jpeg)

Wide-angle cameras on both shoulders

![](_page_11_Picture_2.jpeg)

#### THIEA MOBILITY

## **Data Output**

![](_page_12_Picture_1.jpeg)

THEIA plays sound via internal speaker to guide users by describing the environment in vivid detail, steering them clear of obstacles, and delivering sharp, instinct directions with precision.

THEIA's built-in haptic engine and mini airbags mimics the sensation of a guiding pair of hands on the user's shoulders, gently steering them in the right direction like how a human would. This intuitive approach offers a significantly lower learning curve than traditional navigation tools for the visually impaired, while delivering a uniquely intimate and human-like experience.

#### THIEA MOBILITY

![](_page_12_Picture_5.jpeg)

![](_page_12_Picture_6.jpeg)

![](_page_13_Picture_0.jpeg)

![](_page_13_Picture_1.jpeg)

## Charging

Wireless non-plugin Mobile device Adjustability

![](_page_14_Picture_2.jpeg)

![](_page_14_Picture_4.jpeg)

## **Internals &** Ecosystem

![](_page_15_Picture_1.jpeg)

**Object Detection** 

**{ }** Machine Learning

Camera

Speaker

Collarbone Touchpad

Haptic Engine +Mini Airbags

Shoulder Strap

THIEA MOBILITY

### Visual Impaired

![](_page_15_Picture_11.jpeg)

THEIA's app connects users to a support network of caregivers and volunteers, offering human reassurance alongside Al. It also enables real-time monitoring of the user's well-being, adding an extra layer of safety and peace of mind.

![](_page_15_Picture_13.jpeg)

## Thank You

"The world from your shoulders"

![](_page_16_Picture_2.jpeg)

![](_page_16_Picture_3.jpeg)