

# The Journey Towards Inclusive Education

Braille

Vision

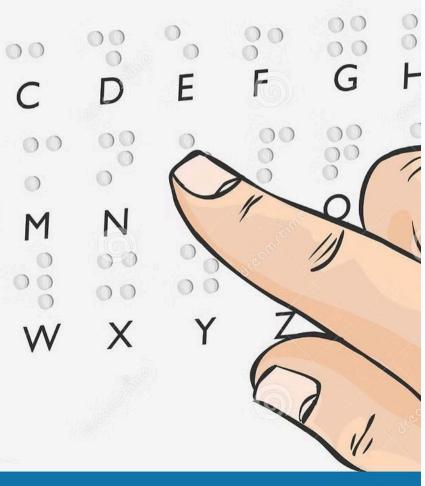
Presented by:

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### Discover the Wonders of Braille

- **Unleash Boundless Potential:** A groundbreaking writing system designed to empower the visually impaired.
- A Timeless Marvel: Unveiled by the ingenious Louis Braille in the 19th century, forever changing the landscape of communication.
- **Ignite the Senses:** Embark on a tactile journey as raised dots come together to breathe life into letters, numbers, and words.
- Unlock the World of Literacy: Empowering the Visually Impaired to access information and indulge in the joy of reading.
- Transforming Lives: Fostering literacy, accessibility, and independence for a brighter and more inclusive future.
- **Seamless Integration:** adaptable and versatile, effortlessly bridging the gap between Braille and written materials.
- A Language Without Borders: Universally embraced, connecting individuals worldwide through the power of touch.

## BRAILLE ALPHABET



- 1 Revolutionary Writing System
  A touch-based writing system empowering the visually impaired.
- Crafted by Louis Braille
  Ingeniously designed in the 19th century.
- 3 Unlock a World of Possibilities
  Raised dots form letters, numbers, and words.
- 4 Experience the Magic of Reading Through Touch Embrace the power of literacy, accessibility, and independence.



#### Braille is a remarkable tool

Transforms lives of visually impaired individuals

#### Braille in everyday life

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3

4

Found on signs, labels, and packaging

#### Braille in education

Enables equal access to information and reading

#### Braille in the digital realm

Refreshable displays and braille-enabled devices

**6** Made with Gamma

# ate by Age-Group Literacy Rate by Age-Group Age: 15-24 80% Age: 65+ Data source: UNESCO for developing world - oth

## **Braille Literacy**

#### Empowering the Visually Impaired

Promote accessibility and independence for the visually impaired through Braille literacy.

#### **Global Impact**

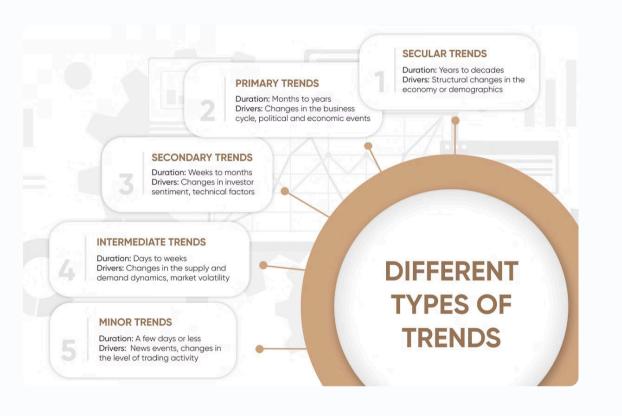
Facilitate touch reading globally with Braille literacy, with slight language variations.

#### Promoting Literacy

Promote literacy among the visually impaired with Braille literacy and reading of various materials.



OurWorldinData.org where you find more research on global development.



# Unveiling Industry Insights

Unlock the secrets of the market to drive informed decisions and stay ahead of the curve.

# Discover the power of our innovative solution

#### 1 — Deep Learning

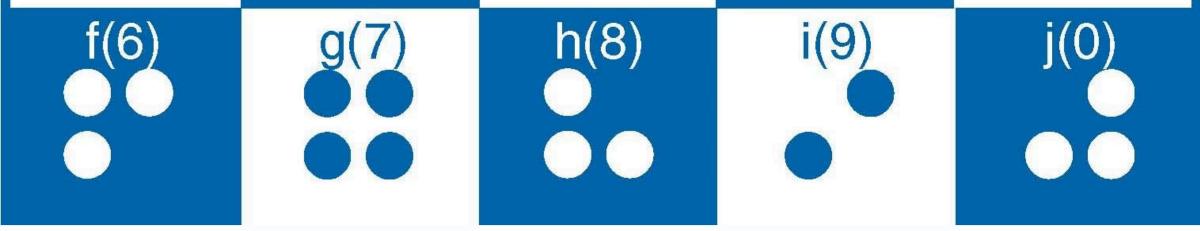
We use deep learning, a smart computer that transforms Braille into English like magic. It understands the intricate dots on a Braille page and effortlessly converts them into words we can read.

#### Computer Vision

We use computer vision, which is like the computer's special eyes, with the help of OpenCV and MediaPipe. These tools help the computer look at the picture of the Braille and understand where the dots are.

#### 3 — User Interaction

We even teach the computer to recognize our finger movements so that we can touch the Braille and the computer knows what we want to read. It's a bit like teaching a friend to understand our hand gestures.



# See the world differently with Braille Vision's powerful capabilities.

#### Scalability

Technology serves multiple learners simultaneously, reducing the need for individual instructors.

#### **Cost-Effective**

It eliminates the expense of hiring and paying human instructors.

#### 24/7 Accessibility

Learners can access it at any time, without waiting for a tutor's availability.

#### **Consistent Learning**

It offers a standardized curriculum and experience for all users, repeating lessons as necessary.

#### Self-Paced

Learners can progress at their own speed, reducing the need for physical travel.

#### **Remote Learning**

It allows access from anywhere, reducing the need for constant tutor supervision.

#### **Instant Feedback**

The application provides immediate guidance, reducing the need for constant tutor supervision.



## Methodology

