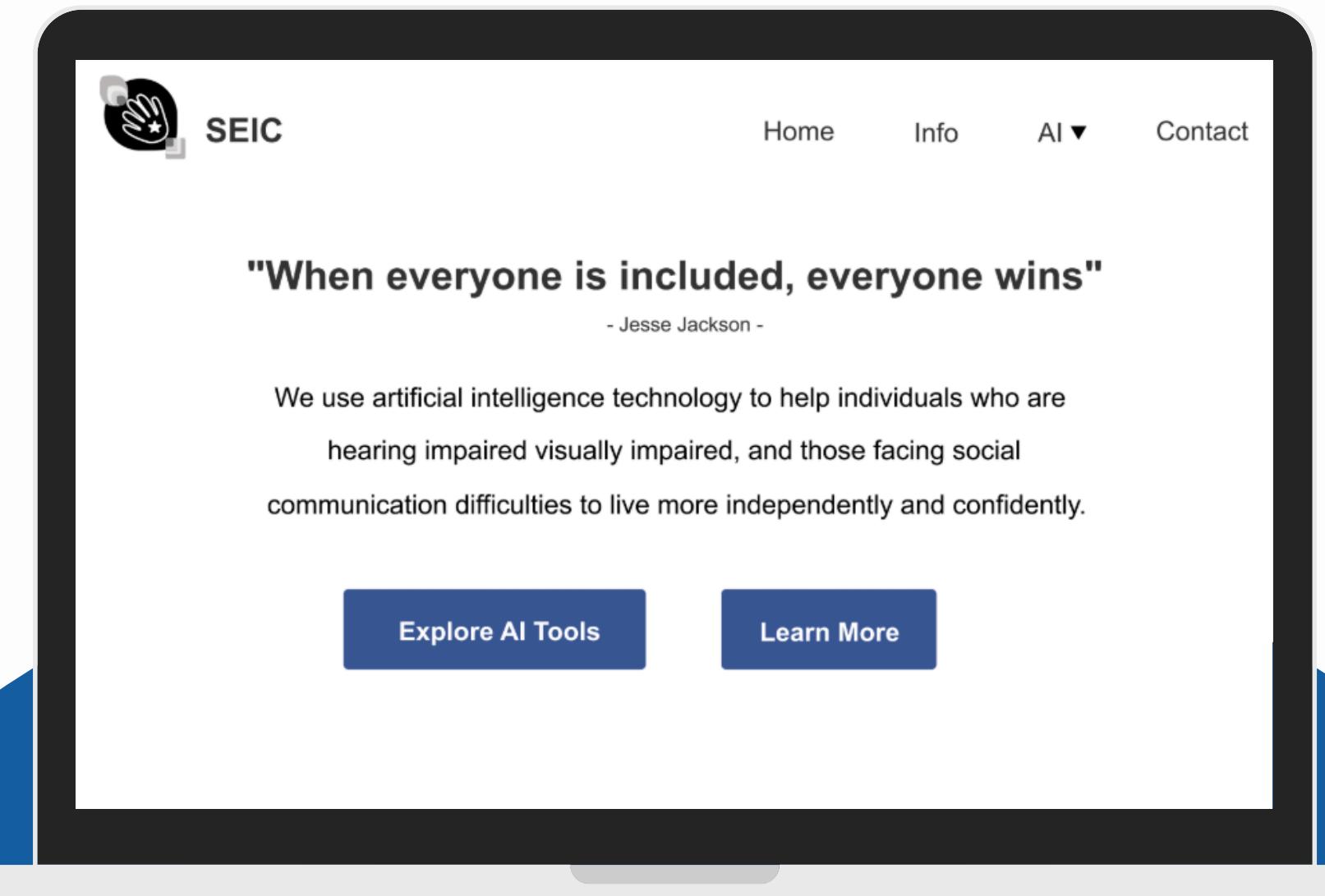




SEIC

Social Equity in Communication



The image shows a screenshot of the SEIC website. At the top, there is a navigation bar with the SEIC logo (a hand icon), the word "SEIC", and links for "Home", "Info", "AI ▾", and "Contact". Below the navigation bar, a quote is displayed: "**"When everyone is included, everyone wins"**" - Jesse Jackson -. A paragraph of text follows, stating: "We use artificial intelligence technology to help individuals who are hearing impaired visually impaired, and those facing social communication difficulties to live more independently and confidently." At the bottom of the page are two blue buttons: "Explore AI Tools" and "Learn More".

GitHub: <https://github.com/tandung1309/seic-project>

Problem Overview

- 300 million+ people suffer from colorblindness.
- 430 million+ people have hearing loss (WHO).
- Muteness is underrepresented due to lack of data.
- These disabilities affect day-to-day communication and safety



Real-life Inspiration

- Stand-up comedy shows have sign language interpreters → but not everywhere.
- Colorblind people face difficulty recognizing traffic lights → potential safety hazard .
- Insight: People don't choose their disabilities, but technology can help level the playing field.



Project Goals

- Empower people with: Hearing impairments via sign language detection.
- Colorblindness via symbolic color recognition.
- Make communication and navigation more inclusive.



Tech Stack



HTML5, CSS3,
JavaScript (ES6+)

How do I use it?

Class 1 Class 2

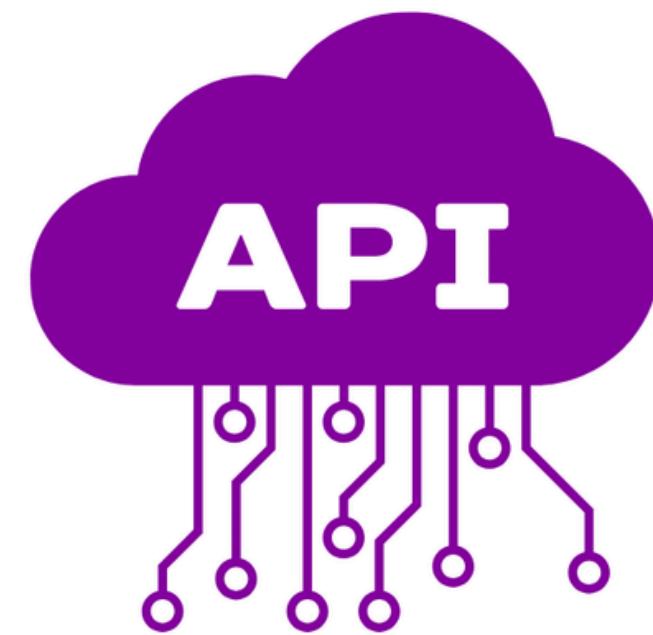
TRAIN MODEL

1 Gather
Gather and group your examples into classes, or categories, that you want the computer to learn.
[Tutorial: Gather samples](#)

2 Train
Train your model, then instantly test it out to see whether it can correctly classify new examples.
[Tutorial: Train your model](#)

3 Export
Export your model for your projects: sites, apps, and more. You can download your model or host it online for free.
[Tutorial: Export your model](#)

TensorFlow.js +
Teachable Machine

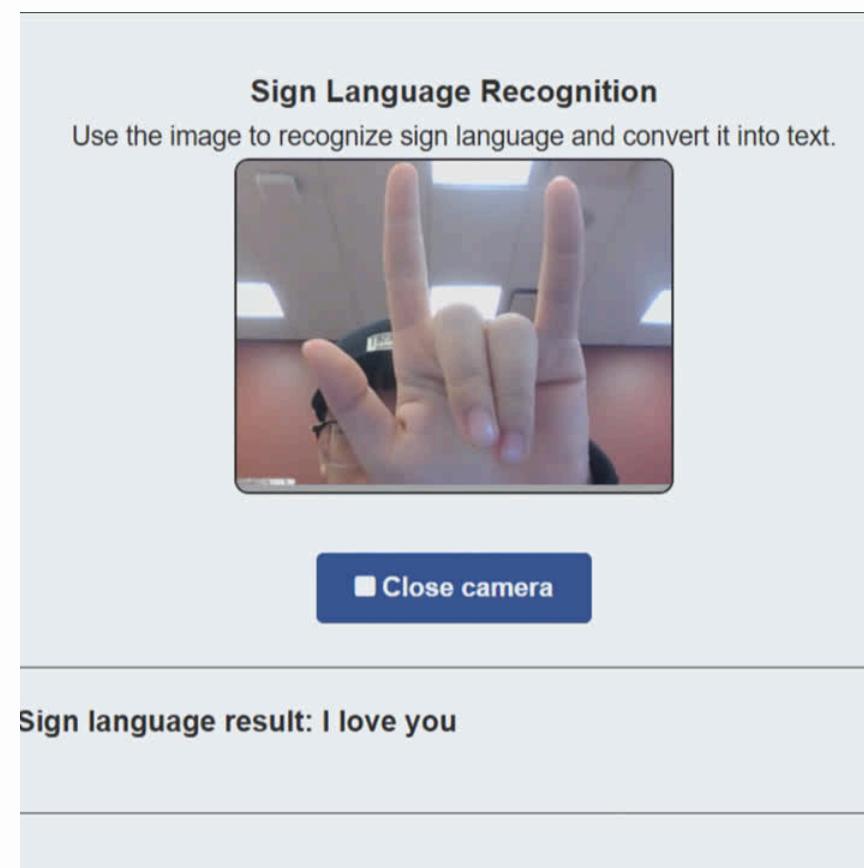


Canvas API, ImageData
API, WebRTC

Demo

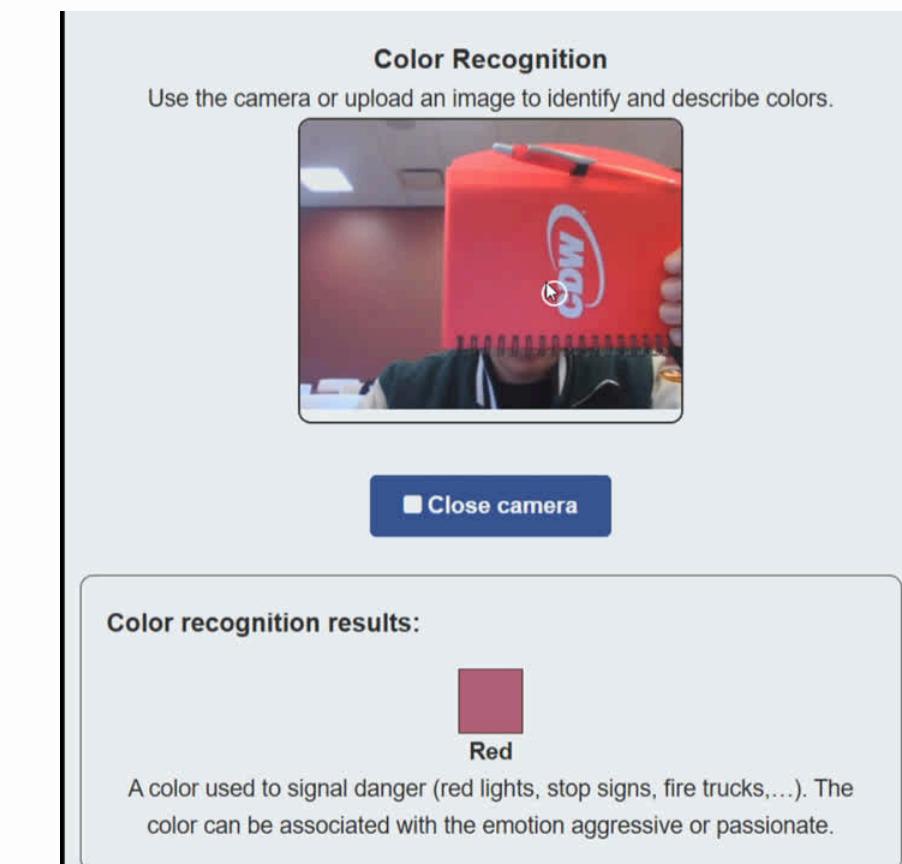
Sign Language

- Detects sign language and translates it into text
- High impact potential to understand between people



Color Detection

- Detects colors and translates them into symbols/labels.
- Helps colorblind individuals understand color functionally



Conclusion & Call to Action

- AI is not a cure, but it is a powerful equalizer.
- With more resources and data, we can build truly inclusive tools.
- Invite developers and organizations to contribute to open-source development

