



# ENSE 400: VLOG I

## TEAM VISUSPEAK

Team Members

- Archisha Bhattacharya
- Brooklyn Coulson
- Jasmeet Singh

## **01 TEAM MEMBERS**

Team member's project roles and responsibilities

## **02 PROJECT BACKGROUND & BUSINESS NEED/OPPORTUNITY**

Context and background history of our team's project

## **03 PROJECT REASON**

Motivation and purpose of the project

## **04 PROJECT IMPACT**

Expected effects on the current reality and our users

## **05 WHO: OUR AUDIENCE**

Defining our audience and location

## **06 WHAT: PROPOSED SOLUTION**

Defining our project idea and constraints

# TEAM MEMBERS

- Brooklyn Coulson  
Front-end Developer, Documentation & GitHub Manager
- Archisha Bhattacharya  
Full stack Developer, Server Manager & Communications Co-Manager
- Jasmeet Singh  
Full Stack Developer, UI /UX Designer & Communications Co-Manager



## PROJECT BACKGROUND & BUSINESS NEED/OPPORTUNITY



Many people with special needs, particularly those with vocal and hearing impairments, rely on American Sign Language (ASL) as their primary mode of communication.

However, there is frequently a significant communication gap between ASL users and those who speak or understand English primarily.

This gap can lead to misunderstandings, limited opportunities, and exclusion for ASL users in various areas, such as education, employment, healthcare, and social interactions.

Our proposed project provides a reliable tool for communicating with English-speaking individuals, thereby reducing communication barriers and fostering inclusion.

This application can facilitate communication between ASL Users and English speakers in educational settings.

## PROJECT REASON

A lot of folks with special accessibility needs, especially those who might have vocal and hearing impairments, mainly use American Sign Language, or ASL, to communicate with others.

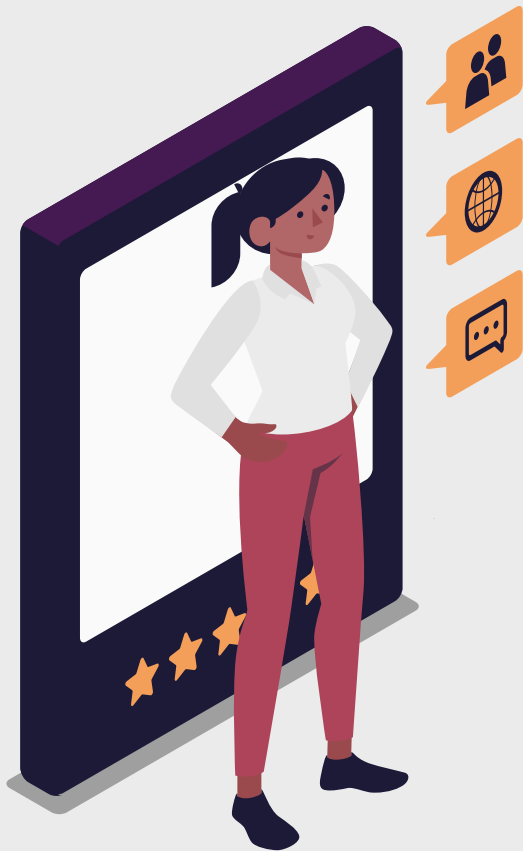
But there's this big gap when it comes to communicating between ASL users and English speakers, who might not necessarily understand ASL.

In areas like education, employment, and social interactions, ASL users can feel excluded, which can result in limited opportunities and exclusion.

Our team's goal is to bridge this communication gap by developing a technology solution that facilitates seamless communication between ASL users and English speakers.



## PROJECT IMPACT



By facilitating improved communication between the ASL and English-speaking communities, we aim to create opportunities for mutual benefit.

The ASL community stands to gain increased inclusivity, more meaningful communication, and greater independence, while the English-speaking community can enhance its understanding of ASL and communication efficiency.

Our commitment to bridging this communication gap is underscored by the development of an accessible, informative, and accurate end product.

In this endeavor, we harness a range of resources to leverage new AI technologies, prioritize user-centric design, and apply engineering concepts.

Additionally, we are dedicated to deepening our understanding of the ASL community and American Sign Language, continuously revisiting relevant materials and resources.

## WHO: OUR AUDIENCE

The primary audience for our project is individuals with vocal and hearing impairments who use American Sign Language (ASL) as their primary mode of communication.

Additionally, our audience includes English speakers who may interact with ASL users and wish to bridge the communication gap.

The opinions that matter most include those of ASL users. Expert opinions from professionals in the field of accessibility who are also in our user group is also important to ensure the effectiveness of the application.

We want to reach ASL users who face communication barriers in various aspects of life while seeking information in face-to-face seating.

We want to gear our project towards users in English speaking countries and users who are familiar or use ASL as their primary medium.



## WHAT: PROPOSED SOLUTION



Our team aims to create a platform or application that can accurately interpret ASL gestures using a web camera and translate them into spoken or written English, and vice versa.

By doing so, we hope to empower ASL users and promote inclusivity in various aspects of their lives.

We think using neural networks would be the optimal way of achieving real-time recognition and translation of ASL gestures from video input.

To define the scope of our project, we will be focusing on translation only between ASL and English

We feel other sign languages can be included in future iterations given the time constraint.

We are also seeking ASL experts who can give us more insight about the functionalities that should be included in an application like ours to make it more desirable and usable.



The image features a solid background divided diagonally from the bottom-left corner to the top-right corner. The upper-left portion is a light gray, and the lower-right portion is a dark navy blue. The word "THANKS" is written in a bold, red, sans-serif font, positioned in the dark blue area and partially overlapping the diagonal line.

**THANKS**