

# SignStream

Empowering Communication

## Context

3 Million Kenyans are deaf

Hearing Impaired students often do not feel as much a part of the “university family” as their hearing peers

## The Problem

**Videoconferencing tools lack support of technical jargons for deaf students**



# Winnie

USIU-A Deaf Tech Student

## Approach

A Machine Learning model that utilizes user input of sign language to train a video conferencing model for deaf tech university students

## Solution

Login



Personalize sign vocabulary



Test locally



Join a meeting



Access real-time sign translation

ML Model (Sign image sequence of words from user, k-nearest neighbor algorithm) = learned sign language of vocabulary by model

Gap



SignVerse

Good for those learning sign language

# Responsible Computing Practiced

1. Accessibility
2. Inclusion
3. Accountability
4. Privacy and Security



**LIVE DEMO**

## Potential Benefit

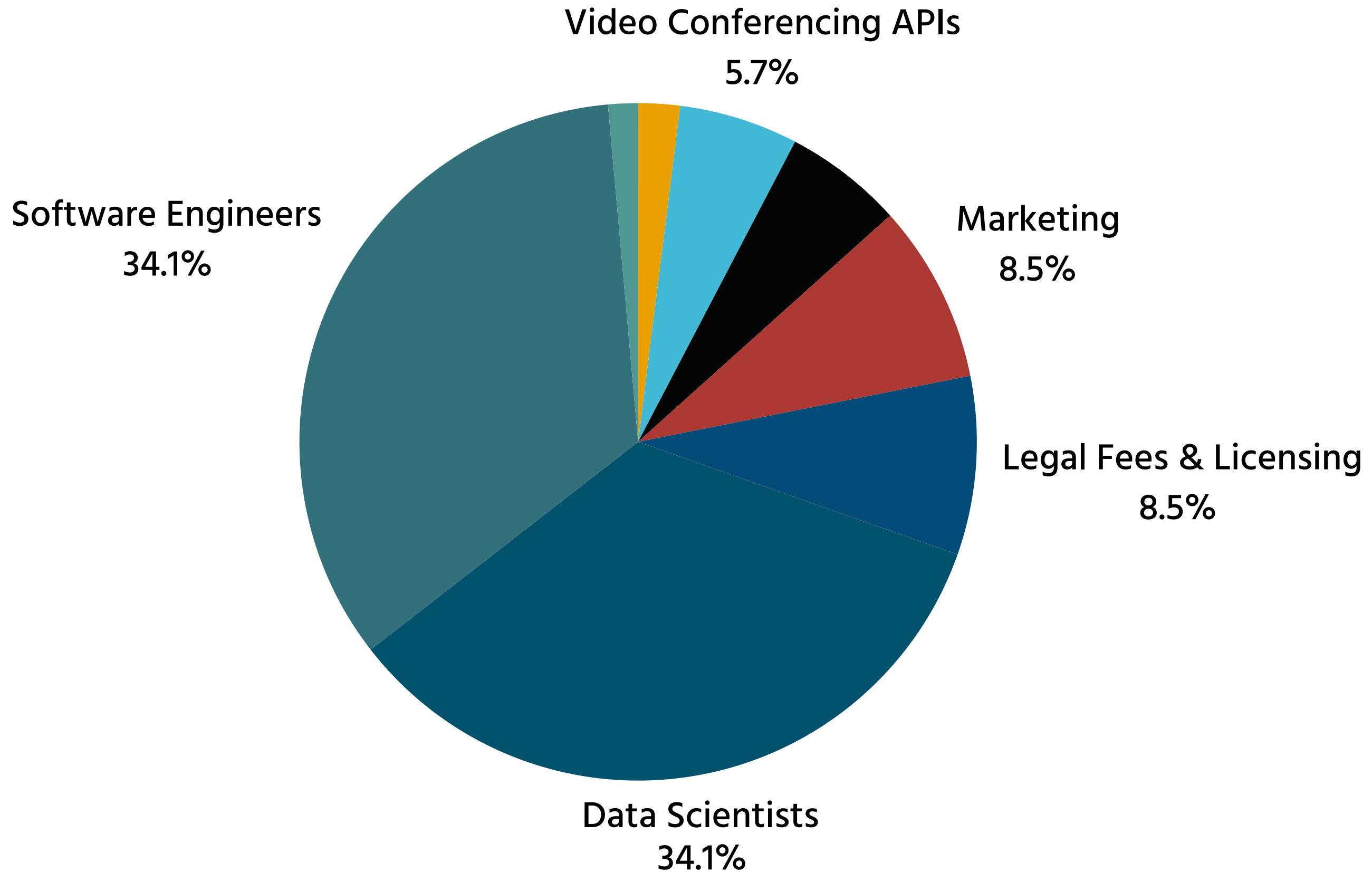
**A personalized learning experience for each deaf student who uses video conferencing tools**

## Market Opportunity

**Deaf students in Kenyan universities offering hybrid or fully online learning programs.**

# Solution Build Ask

**KES 18,000,000**



## Team



**Victoria Rotich**  
**Frontend developer**



**Danny Ercy**  
**Machine Learning  
Engineer**



**Fidel Otieno**  
**Backend Engineer**

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