

# Real-Time Sign Language Detection

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# Real-Time Sign Language Detection

We created this project to help bridge the communication gap between people with hearing or speech impairments and the rest of the world.

## SIGN LANGUAGE ALPHABET

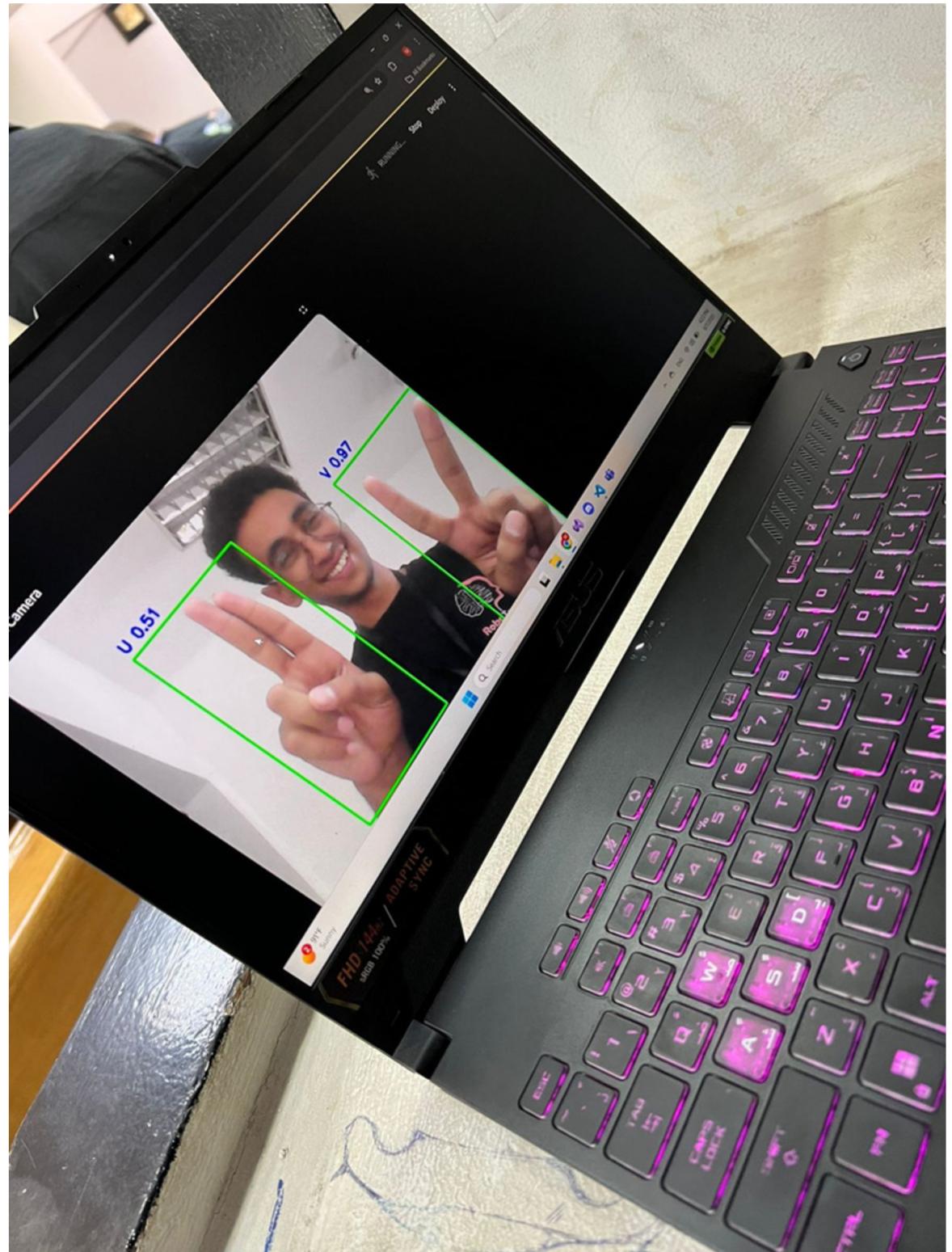


# What Makes Our Project Special



## Two-Hand Detection

Unlike many basic models, our system can detect and distinguish both right and left hand gestures, allowing for more complex and realistic signs.



## What Makes Our Project Special



### Robust to Skin Color & Lighting:

We trained our model with diverse skin tones and lighting conditions, and we have sample images showing its accuracy in those scenarios.

# What We Plan to Add in the Future



## Arabic Sign & English digits Prediction:

Expand the model to recognize Arabic sign language and also detect English digits, making it more accessible and useful for users across the Middle East.

# What We Plan to Add in the Future



## Smart Text Editing:

- Remove letters (backspace)
- Add spaces (spacebar gesture)
- Predict full words, not just letters

# What We Plan to Add in the Future



## Advanced Word Prediction

We want to integrate NLP to predict words before they are fully completed and automatically correct mistakes.

# What We Plan to Add in the Future



## Generate images

We plan to add a feature that generates images based on text input, helping users communicate more visually and effectively.

**Thank you**