

PerSign

Personalized Bangladeshi *Sign* Letters Synthesis

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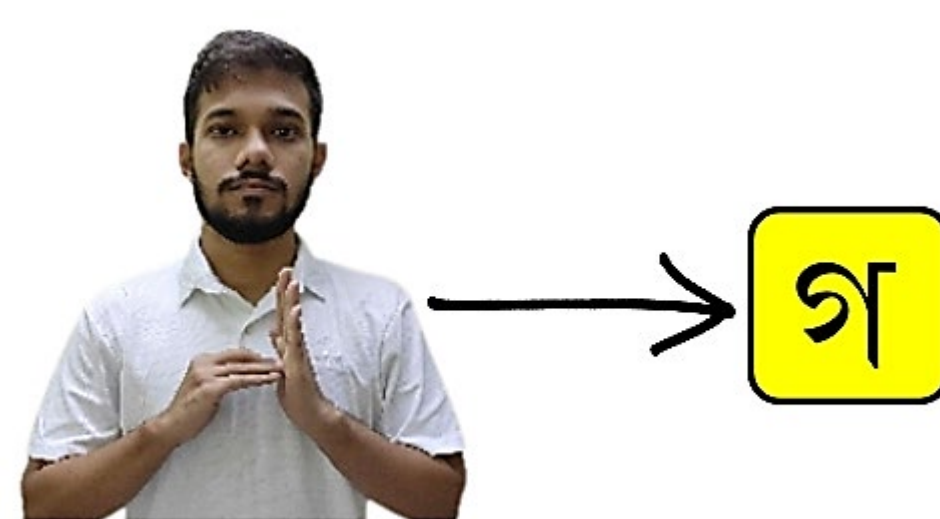
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Overview



Sign Language (for signers)

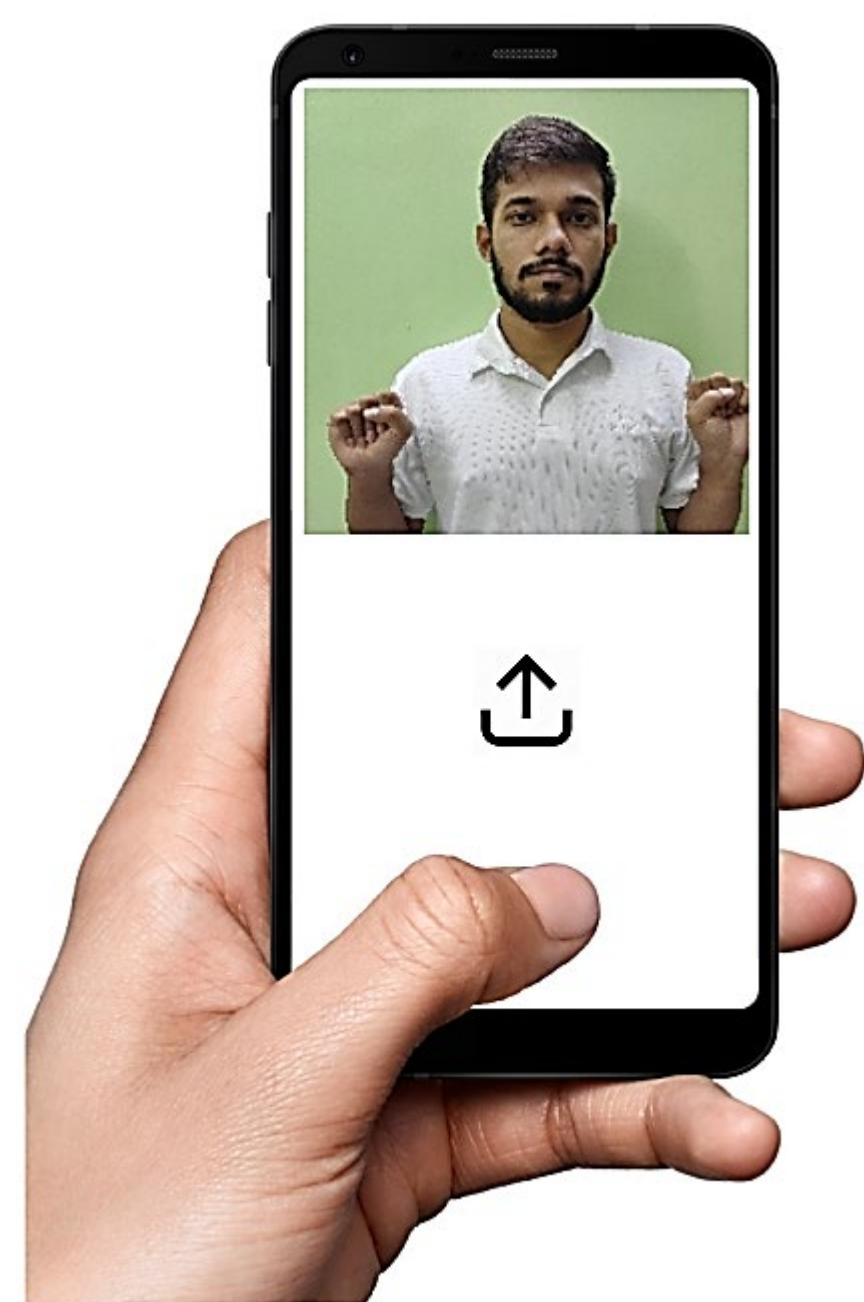


Sign Language Detection



Sign Language Synthesis

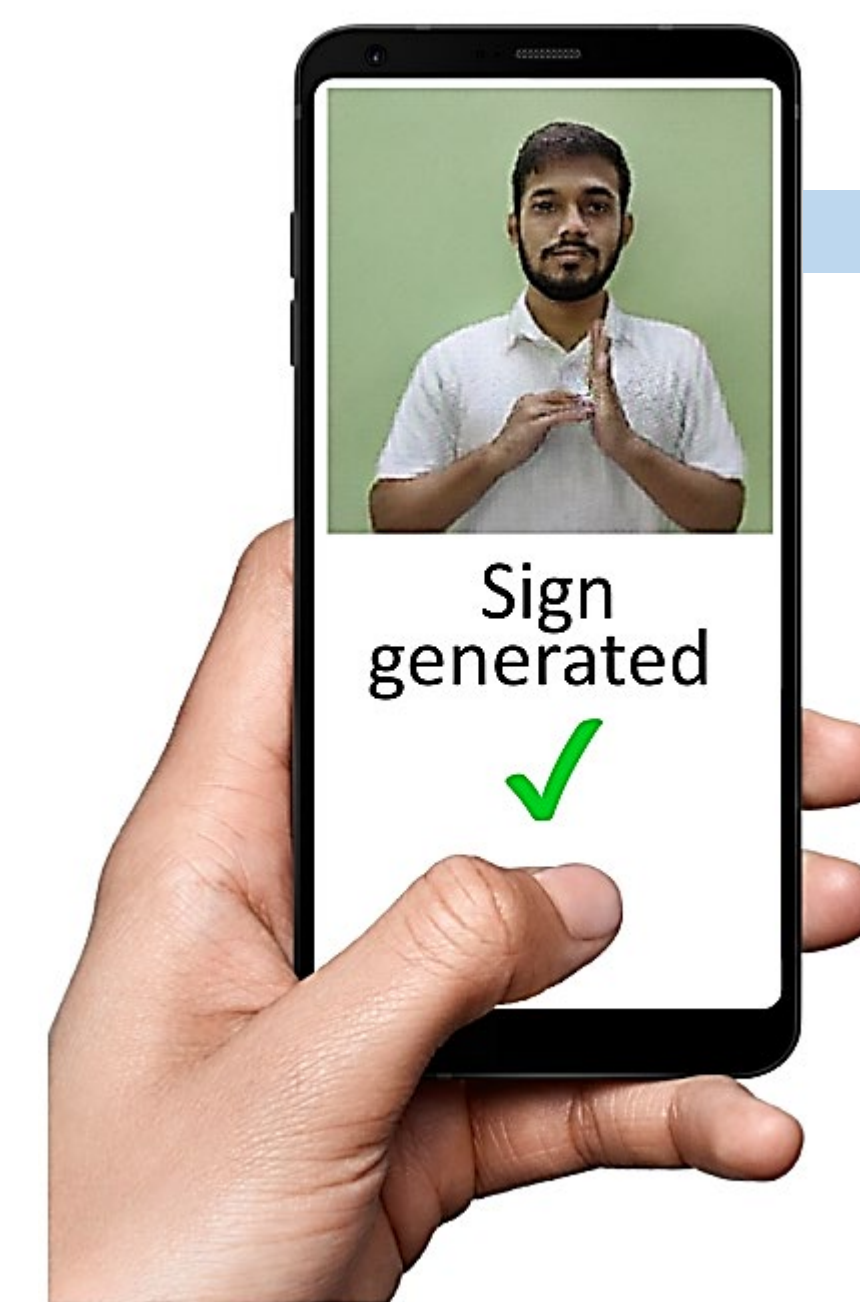
Our System



upload **non-sign** image



provide a **letter**

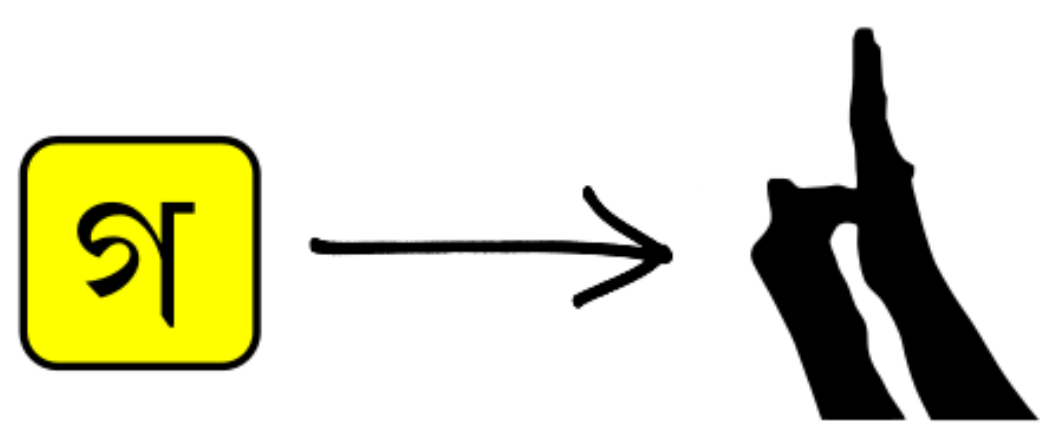


sign Generated >> show it to signers

Appearance
Unchanged!

No
Sign Language
Knowledge
needed!

Related Work



EsharaGAN

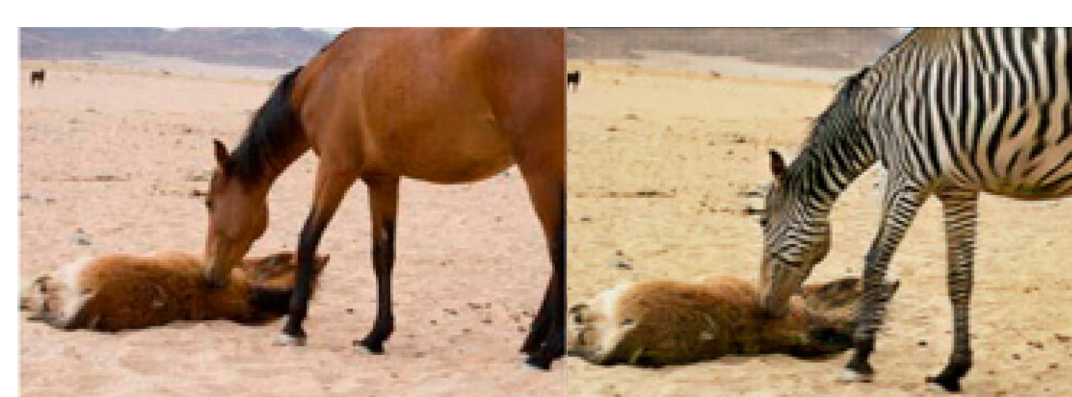
FS Shishir *et al.*
2020

Only generates
symbols!

Motivation

GAN

image2image translation
P Isola *et al.* 2016



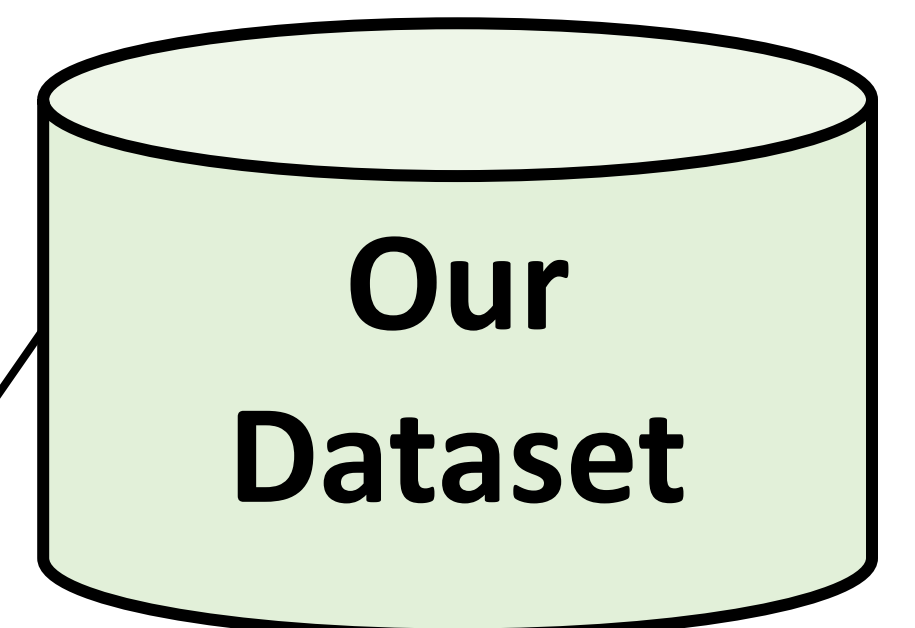
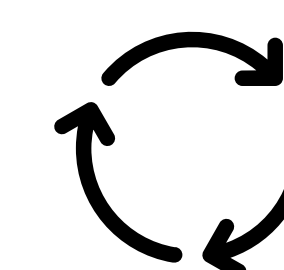
{horse, zebra}

⋮ ⋮

Method + Dataset

GestureGAN

H Tang *et al.*
2018

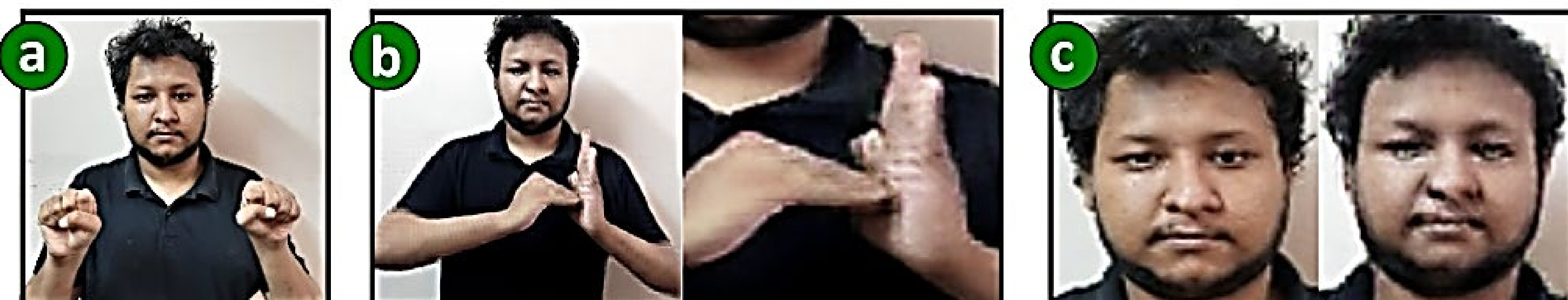


(From institutions +
voluntarily)

{non-sign, sign}

⋮ ⋮

More Results



Future Work

Dataset++

- Diverse
- Augmentation
- Processed
- All letters
- More people

Lite Version

Thorough UX Eval.

One-stop solution

- Detection + Synthesis

Survey

Do we really need **PerSign**?

11 teachers + 6 guardians

(0) 😞 ← → 😊 (5)

★★★★★
13

★★★★★
3

Overall:

4.76

“ **personalized signs** are very helpful for general people to get closer to signers, especially for children. ”

