

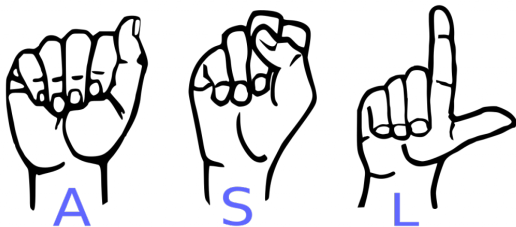
ASL Alphabet Recognition

FDS final project

**Alvetreti Federico, Bassani Aurora, Corrias Ioan,
Luciani Erica, Pelliccioni Gabriele**

La Sapienza Università di Roma

21 November 2022



- **Task:** recognize American Sign Language alphabet, aiming to compose words with it.
- **Motivation:** making sign language accessible to more people.
- **Related work:** Towards Data Science ([link](#))

- **Tentative material and methods:**
 - Asl-alphabet Data Set ([link](#))
 - Edge Detection.
 - Convolutional Neural Networks.

Benchmark:

- Metrics:
 - Accuracy Score.
 - Precision Score.
 - Recall Score.
 - F1 Score.
- Data Set evaluation:
 - Training Set: 87000 images.
 - Test Set : 29 images, to encourage real-world test images.
 - 29 classes (alphabet plus SPACE, DELETE and NOTHING).
 - each image is 200x200 pixels.