

Sign-Language Recognition using Neural Networks

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Problem Statement

- Conversion of sign-language from image to text
- Sign-language is used to represent alphabets and numbers in form of hand gestures



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Approach

- Sign-language gestures are captured in form of images
- Use grey-scale images to train and test the neural network
- Convolutional Neural Network will be used

Previous work

- Sign Language Recognition System using Neural Network for Digital Hardware Implementation

Lorena P. Vargas, Leiner Barba, C O Torres and L Mattos

- Relevant Features for Video-Based Continuous Sign Language Recognition

Britta Bauer and Hermann Hienz

Deliverables

- CNN (Convolutional Neural Network) code
- Trained CNN model(s) which can be used for converting sign-languages images to characters
- A report on comparative study of accuracy using MLP and CNN for this task