IEEE.org IEEE *Xplore* IEEE SA IEEE Spectrum More Sites Subscribe Donate Cart Create Account Personal Sign In

Browse My Settings Help Institutional Sign In

Institutional Sign In

All

ADVANCED SEARCH

Conferences > 2021 International Conference...

A Deep Learning based Recognition System for Yemeni Sign Language

Publisher: IEEE

Cite This PDF

Basel A. Dabwan ; Mukti E. Jadhav All Authors

7 Cites in Papers

36 Full Text Views

Alerts

Manage Content Alerts

Add to Citation Alerts

Abstract

Document Sections

I. Introduction

II. Arabic Sign Language

III. Related Work

IV. Proposed Model

V. Conclusion

Authors

Figures

References

Citations

Keywords

Metrics

More Like This

Downl PDF

Abstract:
There are more than 466 million people with hearing disabilities in the world. Those people need to communicate with others, get learning and interact with activities aro... **View more**

Metadata

Abstract:
There are more than 466 million people with hearing disabilities in the world. Those people need to communicate with others, get learning and interact with activities around them. Sign language is the bridge to eliminate the gap between them and other people. Developing an automatic system to recognize sign language has a lot of challenges, especially for Yemeni sign language, as there are very few researches touching on this language. In this paper, we propose a new Convolution Neural Network based model for classifying the sign language of Yemen. The System was trained and tested using a dataset that includes 16,192 images gathered from 40 people with different distances and variations. The proposed model uses pre-processing methods to remove noises and reposition the images, etc. The results display that the proposed model achieved 94% accuracy.

Published in: 2021 International Conference of Modern Trends in Information and Communication Technology Industry (MTICTI)

Date of Conference: 04-06 December 2021

DOI: 10.1109/MTICTI53925.2021.9664779

Date Added to IEEE *Xplore*: 04 January 2022

Publisher: IEEE

ISBN Information:

Conference Location: Sana'a, Yemen

Contents

I. Introduction

ng [MathJax]/extensions/MathZoom.js

Sign language is considered the most structured form out of many gesture categories. It is an important means of communication between the deaf and dumb community. Sign language not only includes hand gestures but also facial expressions, body postures, and other signs to convey meaning.

Sign in to Continue Reading

Authors

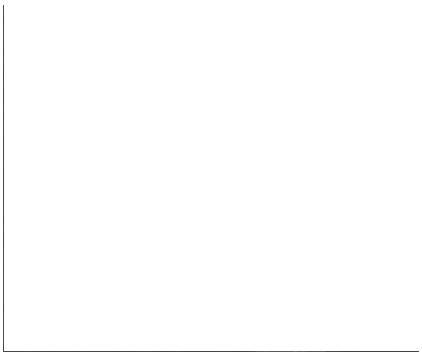
Figures

References

Citations

Keywords

Metrics



More Like This

Research on Optimization of Static Gesture Recognition Based on Convolution Neural Network
2019 4th International Conference on Mechanical, Control and Computer Engineering (ICMCCE)
Published: 2019

Image Recognition based on Convolution Neural Network
2020 IEEE 9th Joint International Information Technology and Artificial Intelligence Conference (ITAIC)
Published: 2020

Show More

Loading [MathJax]/extensions/MathZoom.js

IEEE Personal Account

CHANGE USERNAME/PASSWORD

Purchase Details

PAYMENT OPTIONS

VIEW PURCHASED DOCUMENTS

Profile Information

COMMUNICATIONS PREFERENCES

PROFESSION AND EDUCATION

TECHNICAL INTERESTS

Need Help?

US & CANADA: +1 800 678 4333

WORLDWIDE: +1 732 981 0060

CONTACT & SUPPORT

Follow

About IEEE *Xplore* | Contact Us | Help | Accessibility | Terms of Use | Nondiscrimination Policy | IEEE Ethics Reporting | Sitemap | IEEE Privacy Policy

A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

© Copyright 2024 IEEE - All rights reserved, including rights for text and data mining and training of artificial intelligence and similar technologies.

IEEE Account

» Change Username/Password

» Update Address

Purchase Details

» Payment Options

» Order History

» View Purchased Documents

Profile Information

» Communications Preferences

» Profession and Education

» Technical Interests

Need Help?

» **US & Canada:** +1 800 678 4333

» **Worldwide:** +1 732 981 0060

Loading [MathJax]/extensions/MathZoom.js

» Contact & Support

About IEEE *Xplore* | Contact Us | Help | Accessibility | Terms of Use | Nondiscrimination Policy | Sitemap | Privacy & Opting Out of Cookies

A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.
© Copyright 2024 IEEE - All rights reserved. Use of this web site signifies your agreement to the terms and conditions.

Loading [MathJax]/extensions/MathZoom.js