Submission Summary

Conference Name

2024 IEEE International Conference on Contemporary Computing and Communications

Paper ID

522

Paper Title

Kannada handwritten character recognition

Abstract

Handwritten character recognition is a crucial process that involves converting handwritten text on different surfaces such as paper and postcards into digital formats, making it distinguishable from scanned images. Remarkable advancements have been made in this field, particularly in India, where many languages with complex scripts like Kannada, English, and Marathi are used. Kannada is one of the widely used languages in the southern part of India, and recognizing its handwritten characters is a challenging task due to its complex script. The article explains how CNN, a type of dense net, is used to recognise Kannada's handwritten characters. This technology can help protect many historical documents from damage and destruction, a significant achievement. The article also highlights that the versatility of this machine learning model extends beyond Kannada and can be used in various applications and technology development. The proposed research has used CNN due to its efficient layers, and the data set from char74k consisted of 16 classes of 25 images each for experimentation. The results showed a remarkable 97.50 percent accuracy in 50 epochs, demonstrating the potential of the CNN network in character recognition.

Created on

30/12/2023, 21:23:23

Last Modified

30/12/2023, 21:23:23

Authors

Srushthi Joshi (KLE Technological University) < 01fe21bec130@kletech.ac.in> ♥
U Samarth (KLE Technological University) < 01fe21bec126@kletech.ac.in> ♥
Satish Chikkamath (KLE Technological University) < chikkamath@kletech.ac.in> ♥
Nirmala S R (KLE Technological University) < nirmala.s@kletech.ac.in> ♥
Suneeta Budihal (KLE Technological University) < suneeta_vb@kletech.ac.in> ♥

Primary Subject Area

Intelligent Data Analytics and Computing

Secondary Subject Areas

Communication and Control Systems

Submission Files

Kannada_handwritten_character_recognition.pdf (606.3 Kb, 30/12/2023, 21:20:20)

Submission Questions Response

1. Conflict of interest

The authors declare no conflict of interest and all authors are aware of this submission. In case of any conflict submitting author will be responsible.

Agreement accepted

2. Status of using third-party material in your article.

Third party content is defined as any material within the manuscript which is not your original work. Third party content may consist of text passages, figures, photos, screenshots, etc. and be found in many places such as but not limited to - the Internet, print and online books and articles, theses, annual reports, conference material, photocopies, course packages, translations, visually impaired readers. In particular, pay close attention to sensitive images such as identifiable persons or human research participants, recognisable architecture, logos, brands/trademarks, and images from online photo libraries. Please refer to Springer Nature Guide to Copyright and Permissions for further guidance. You are responsible for clearing the rights for third party content under your publishing agreement. Please confirm if your manuscript contains any third-party content?

I am still working through permissions-related questions regarding use of third-party material

3. Certificate of originality

This is to certify that my submitted research paper is an outcome of my research work. I have duly acknowledged all the sources from which the ideas and extracts have been taken. The submitted paper is free from plagiarism and has not been submitted elsewhere for publication. I am aware that the publisher/conference organizer can reject it at any publication stage if the similarity is >20%.

Agreement accepted

4. Corresponding Author's Contact number

Please provide the Contact number of the Corresponding Author, including the Country code.

+91 9900988154

5. Country Name

Please provide the Name of the country for all authors, separated by a comma.

India