A Scoring System of Chinese Calligraphy Copy Work

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As one of the traditional cultures in China, Chinese calligraphy has transcended the boundaries of language and become a form of art exhibited in homes and museums. For beginners, mastery of calligraphy begins with copying calligraphy works. However, beginners often struggle to determine whether their characters are similar to the copybooks. Therefore, this research project introduces a scoring system for calligraphy works featuring sixteen characters from regular script calligraphy works, and aims to provide an online "calligraphy teacher" for beginners. The proposed system is designed to automatically score handwriting and the copybook uploaded by users based on official criteria, including stroke, structure and composition, using a siamese network and traditional image processing methods. The majority of the results closely match the pre-evaluation scores from the calligraphy teacher, achieving an accuracy rate of 92.10%. The project is presented as a website, which provides more possibilities for self-study of calligraphy, and also promotes the learning of calligraphy to a wider audience. This includes primary and secondary school students, as well as foreign friends who are interested in calligraphy practice. The proposed method is currently focused on the entire calligraphy work, which is different from the existing calligraphy grading method that only grades individual characters. This system offers prospects for the development of automated calligraphy evaluation, and may have practical applications in promoting calligraphy education. The system also has the potential to be applied to calligraphy grading of other languages and writing systems.

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