

Rice Quality Analysis Using Image Processing

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Abstract: *In many Asian countries, rice is a popular food that lots of people eat. It is easy to find worldwide. When people use rice for food, they often make different products from it. In farming and food science, checking the quality of rice is really important to make sure people like it and to farm it well. This study wants to change how we usually check rice quality. Instead of doing it by hand, we want to use computers to look at pictures of rice and figure out if it's good or not. We'll use fancy math and technology to do this quickly and accurately. This new way will make it easier to make sure rice is good quality, which is important as farming keeps changing. By employing advanced algorithms and image pre-processing techniques, this research aims to automate the evaluation process. The focus is on identifying key quality parameters such as grain size and shape swiftly and accurately. This innovative approach not only enhances precision but also streamlines the assessment process, offering a promising avenue for optimizing rice quality control in agriculture and food science.*

Keywords: Image processing, Segmenting, Morphology, classification, Algorithm