

Malnutrition Detection using AI

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Abstract: *In many nations, malnutrition is directly or indirectly to blame for the mortality of children. The likelihood of death can be reduced and physical and health problems can be treated or minimised by identifying malnourished children. The primary source of energy is a balanced diet. Healthy nutrition enables cells to carry out routine tasks quickly. A lack of sufficient nutrition during pregnancy and delivery can lead to several difficulties later on in life. These complications include underweight, brittle, dry hair, ridged or spoon-shaped nails, mental illness, stunting, enema, wasting, stunting, and brittle nails. Malnutrition is a disorder that develops when a person consumes a diet that is either excessively rich in some nutrients or insufficient in one or more of the major nutrients. Underweight (low weight for age), stunting (low height for age), and wasting (low weight for height) are all symptoms of PEM. 48 individuals. In India, most children with mild to moderate undernutrition remain unnoticed, which affects their growth at a young age. Early malnutrition detection lowers overall healthcare costs and improves health outcomes. Convolutional Neural Networks (CNNs), a Deep Learning method, are used in the proposed system to assess input, analyse input images, and distinguish one image from another. Here, Transfer Learning and datasets for the training process make up the architecture. The system uses a photograph of a child as its input and compares it to a trained model to determine if the child is normal or malnourished. The system's goal is to identify child malnutrition so that people and healthcare professionals can apply automation in place of a manual procedure to lessen the impacts caused by malnutrition.*

Keywords: Malnutrition, Deficiency, Malnutrition, Deep learning, CNN

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