

Title:- AI-DocHelper

Abstract: For many years, many people have died due to undetected diseases. Early detection of these diseases at the micro classification stage can be useful for providing proper treatment to the patients at the early stage and could have saved a lot of lives. A lot of research is being done to detect these diseases at the earliest. Therefore, a computer-aided or artificial intelligence approach for detecting diseases at the early stage is being proposed, which makes use of machine learning and deep learning algorithms for detecting diseases. This system will detect all general diseases such as different types of cancer, malaria, diabetic retinopathy, etc. AI-DocHelper is being proposed as there is no system available, that detects all these general diseases.

Problem Statement: AI-DocHelper, an artificial intelligence-based system that can detect general diseases at an early stage, will take textual and/or image data as input. All relevant features will be extracted from the input data. For a disease to be detected, different classification models will be applied to the feature extracted training data. The model that gives the best accuracy and minimum loss in the testing phase will be selected as the final model for detecting a particular disease. The output or final result is the classification of whether a particular patient has a particular disease or not.

Technical Papers: http://tiny.cc/IEEE_Papers

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- 2) Y. Lu, J. Li, Y. Su and A. Liu, "A Review of Breast Cancer Detection in Medical Images," *2018 IEEE Visual Communications and Image Processing (VCIP)*, Taichung, Taiwan, 2018, pp. 1-4, doi: 10.1109/VCIP.2018.8698732.
- 3) S. Nayak, S. Kumar and M. Jangid, "Malaria Detection Using Multiple Deep Learning Approaches," *2019 2nd International Conference on Intelligent Communication and Computational Techniques (ICCT)*, Jaipur, India, 2019, pp. 292-297, doi: 10.1109/ICCT46177.2019.8969046.
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- 7) A. Shrivastava, I. Jaggi, S. Gupta and D. Gupta, "Handwritten Digit Recognition Using Machine Learning: A Review," 2019 2nd International Conference on Power Energy, Environment and Intelligent Control (PEEIC), Greater Noida, India, 2019, pp. 322-326, doi: 10.1109/PEEIC47157.2019.8976601.