



# EARLY DISEASE DETECTION USING NAIL IMAGE PROCESSING

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## INTRODUCTION

- Nails indicate health and diagnose various diseases.
- Nail colour and shape reveal overall well-being and identify disorders, including anaemia, liver dysfunction, fungal infections, and oxygen deficiency.
- Developing a model for diagnosing and treating nail disorders at early stages

## OBJECTIVES

- Non-invasive, low-cost, and accessible method for early disease detection
- Improved accuracy of disease detection
- Provide a low-cost alternative

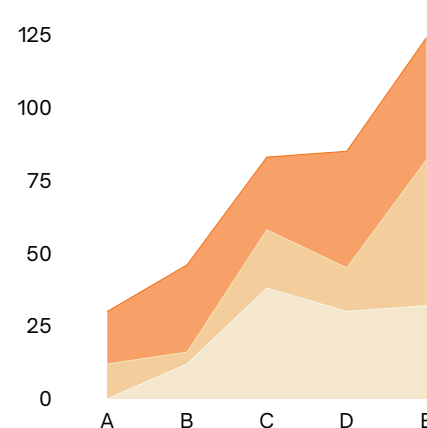
## SAMPLE DATASET

## LITERATURE REVIEW

- A proposed system using nail colour changes for disease diagnosis achieved 65% accuracy on seven types of nails [1].
- Segment the nail image using Watershed, Thresholding, and K-means segmentation techniques in [2].
- The system analyzes image features and predicts diseases using medical palmistry, but analyzing nails will take more time due to time-consuming image enhancement methods[3].
- Our system uses nail color and shape changes to diagnose nail conditions with 97% accuracy, making it easy to extract nail features.

## RESULTS

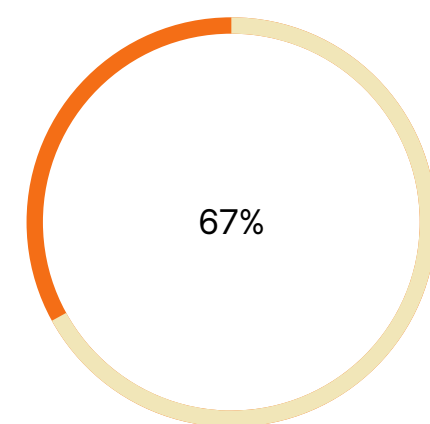
In a regular research paper, the analysis section is one of the longest parts as it builds on the information that supports the objective and thesis. With a research poster, you can trim down the analysis to the most important parts. Use bullets to emphasize points. Include key graphs, tables, graphics, and other images that support the study and show a visual analysis of the data.



Use graphs to show visualization of your data's analysis.



Illustrations are also great aids to help your research poster.



## CONCLUSION

To wrap up your poster, present two to three key findings. You can also add a brief explanation or narrative to these that can encourage conversation or dialogue with the audience. These findings can be actionable items that can lead to implementation, policy creation, or further study.

## REFERENCES:

- [1] Indi, T. S., & Gunge, Y. A. (2016). Early stage disease diagnosis system using human nail image processing. *IJ Information Technology and Computer Science*, 7, 30-35.
- [2] Saranya, V., & Ranichitra, A. (2017). Image segmentation techniques to detect nail abnormalities. *Scholar*, 2(1).
- [3] Hardik Pandit, & D M Shah (2011). Application of Digital Image Processing and Analysis in Healthcare Based on Medical Palmistry. *IJCA Special Issue on Intelligent Systems and Data Processing (ICISD)*, 56-59.

