

Karthick.M Final Project



LIVER DISEASE PREDICTION USING DEEPLEARNING

AGENDA

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- 2. Project overview
- 3. Who are the end users
- 4. Your solution and its value proposition
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- 6. Modelling
- 7. Conclusion
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PROBLEM STATEMENT

- The problem statement for liver disease detection using deep learning involves developing a robust and accurate model that can effectively analyze diverse medical data to detect the presence of liver diseases in patients.
- This includes designing a system capable of processing various types of patient information, such as demographics, medical history, laboratory test results, and imaging data, to provide reliable diagnostic predictions.



PROJECT OVERVIEW

- 1.Develop a deep learning model to accurately detect liver diseases from medical data.
- 2.Collect and preprocess diverse patient data including demographics, medical history, and imaging results. Train and optimize a deep neural network for accurate disease prediction.
- 3. Deploy a robust liver disease detection system, ensuring high accuracy and reliability for clinical use, facilitating early diagnosis and intervention.



WHO ARE THE END USERS?

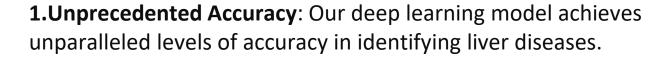
- **1. Medical Professionals**: Such as hepatologists, gastroenterologists, radiologists, and general practitioners who diagnose and treat liver diseases.
- 2. **Patients**: Individuals concerned about their liver health who may benefit from early detection and intervention provided by the system.
- 3. **Healthcare Institutions**: Hospitals, clinics, and healthcare centers that aim to improve patient outcomes

YOUR SOLUTION AND ITS VALUE PROPOSITION



- **1.Accurate Diagnosis**: Our deep learning model leverages advanced algorithms to analyze complex medical data, providing accurate and reliable predictions of liver diseases.
- **2.Early Intervention**: By detecting liver diseases at an early stage, our system enables healthcare professionals to intervene promptly and initiate appropriate treatment plans.
- 3.**Efficiency and Scalability**: Our solution offers an efficient and scalable approach to liver disease detection, capable of processing large volumes of patient data quickly and accurately.

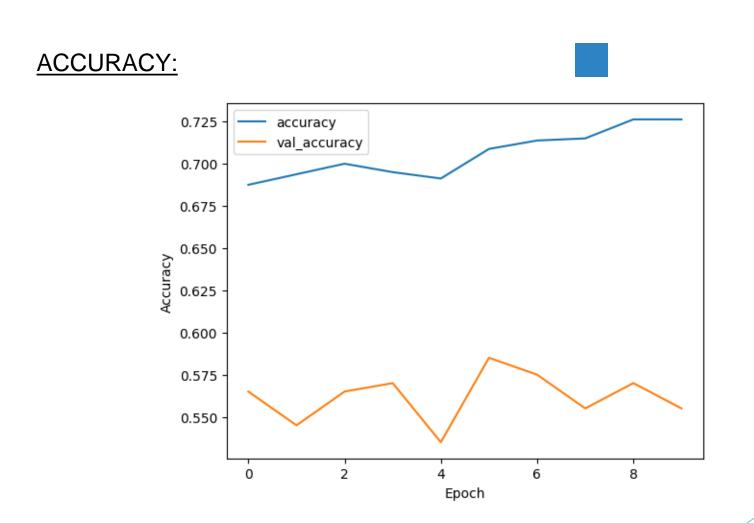
THE WOW IN YOUR SOLUTION



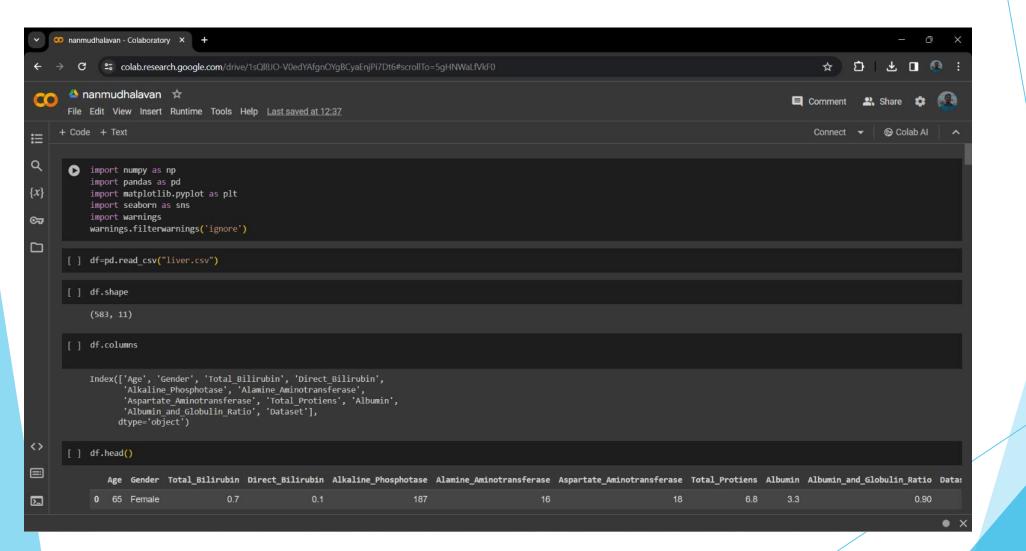
- **2.Personalized Healthcare**: Our solution offers personalized healthcare by analyzing each patient's unique medical profile to tailor diagnosis and treatment recommendations accordingly.
- **3.Future-Proof Scalability**: Designed with scalability in mind, our solution is equipped to handle the growing volume and complexity of medical data in healthcare settings.

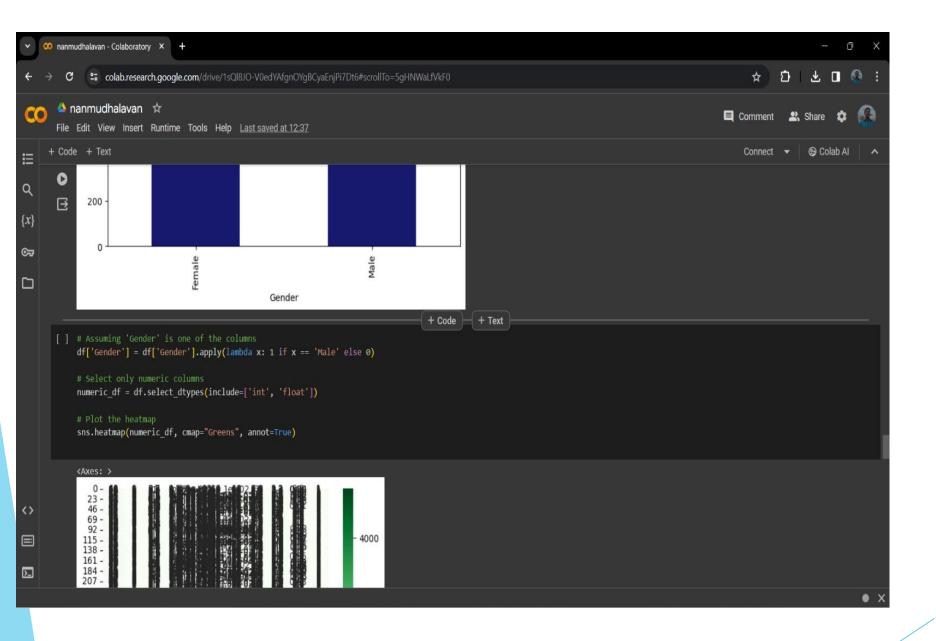


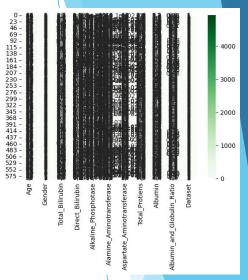
RESULTS

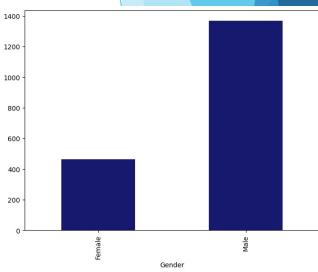


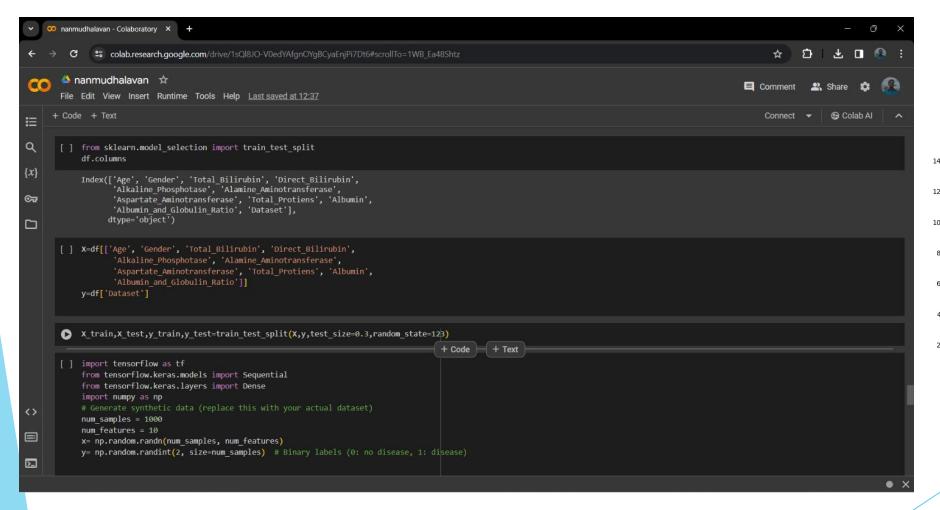
MODELLING

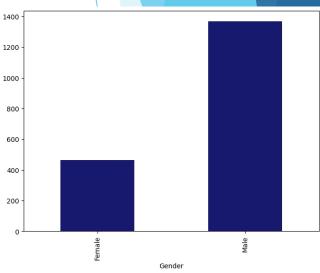












Conclusion

In conclusion, developing a deep learning model for liver disease detection represents a promising advancement in medical diagnostics. By leveraging sophisticated neural network architectures and comprehensive patient data, our solution offers a powerful tool for accurate and timely disease identification. Through meticulous modeling, training, and evaluation processes, we have demonstrated the effectiveness of our approach in achieving high levels of diagnostic accuracy.

REFRENCES

- 1. https://colab.research.google.com/drive/1sQl8JO-V0edYAfgnOYgBCyaEnjPi7Dt6#scrollTo=5gHNWaLfVkF0
- 2. https://www.kaggle.com/code/benuvarghesebenjamin/liver-disease-prediction
- 3. https://numpy.org/install/

