PDuCV

Team 4

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Introduction

Our project aims to save the necessary time and energy of doctors that can be deviated to other tasks. In the modern era where the cooperation between humans and technology is reaching heights and opening new pathways, where loads of human task is replaced by machines with precision and more accurate results. It seems foolish not to incorporate technology to increase disease detection and make the world a safe and better place.

Problem Statement

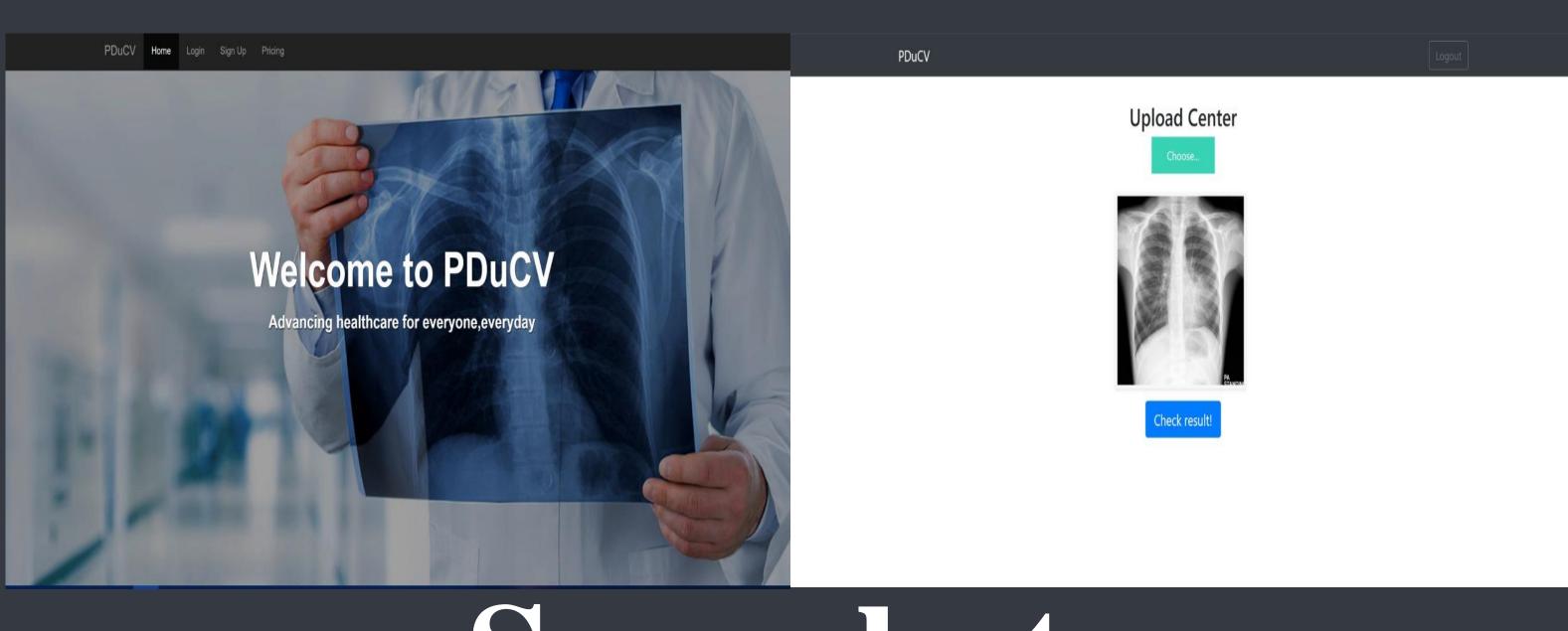
As we know the traditional methods of pneumonia detection have become more time-consuming and human effort taking and neither as secure and cost-effective as its technological counterpart. Also, these old methods are compromised with errors.

Solution

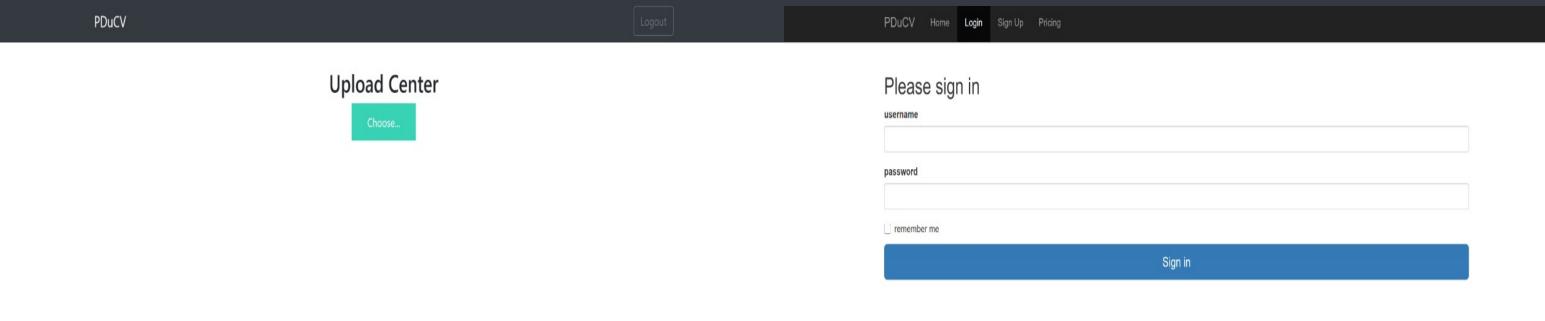
The solution is achieved by creating a platform that uses machine learning to detect pneumonia in the X-ray scan provided to it, combining with strong frameworks on both front and backend side, provides the result as output and once the whole process is completed, it stores that data for the professionals to access latter for medical reasons.

Bennett University

Pneumonia Detection using Computer Vision



Snapshots





Technologies Used

Software — Git for version control,
Python and for back-end design and
making the model, HTML, CSS, and
JavaScript for front-end Design, Adobe
XD for UI/UX design.

Hardware — NVIDIA GPU for training the model

Tensor Flow 2 for deep learning and Datasets from Kaggle to train the models.

Conclusion

We have reached the main goal behind the project of providing a Machine learning-based platform that detects pneumonia in the provided entry and after providing the findings from the input, stores it in the dataset for later access, it helps in providing an alternative to human error while also increasing the overall accuracy and confidence in the medical field.

Future Work

- Better accuracy that will be more aesthetically convincing.
- For a better UI/UX experience we can add more features and services.
- Will try to accept different data types like DICOM, TIFF etc

Scan the QR code to go to PDuCV Github Repository

