

Breast Cancer Detection

**WITH MAMMOGRAM IMAGES
AND REPORTS.**

Ananya G
Asfiya Firdouse
Bindu Madhavi V
Monisha Murthy

Pentagon
GAT119



TEAM MEMBERS



Ananya G: Coordinated team efforts, oversaw project integration, established connections with IBM Z LinuxONE

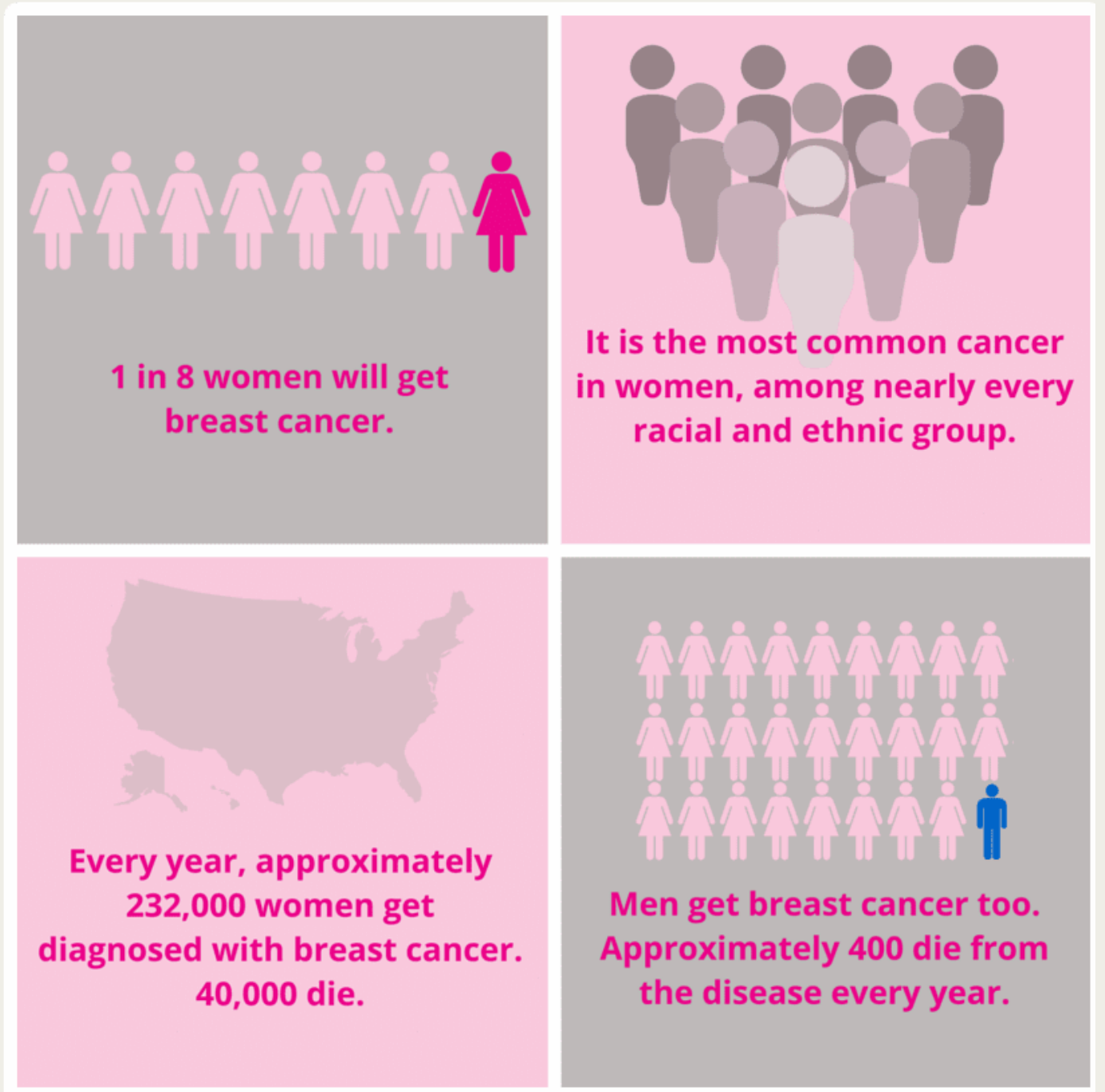
Monisha Murthy: Developed a sophisticated deep learning model capable of accurately detecting mammogram tumors.

Asfiya Firdouse: Created a robust machine-learning model to predict breast cancer risk based on patient reports.

Bindu Madhavi V: Designed and implemented a user-friendly web interface.

PROBLEM STATEMENT

Breast cancer is a major global health concern, affecting millions of women worldwide. Early detection is crucial for improving treatment outcomes and increasing survival rates. While mammograms are a vital screening tool, manual interpretation can be time-consuming and prone to human error.



PROBLEM STATEMENT

This project aims to develop an automated system that can accurately detect breast cancer in mammogram images, leveraging the power of machine learning and artificial intelligence. By combining mammogram analysis with relevant patient data, the system will assist radiologists in identifying potential cases of breast cancer, leading to more timely and effective diagnosis and treatment planning.

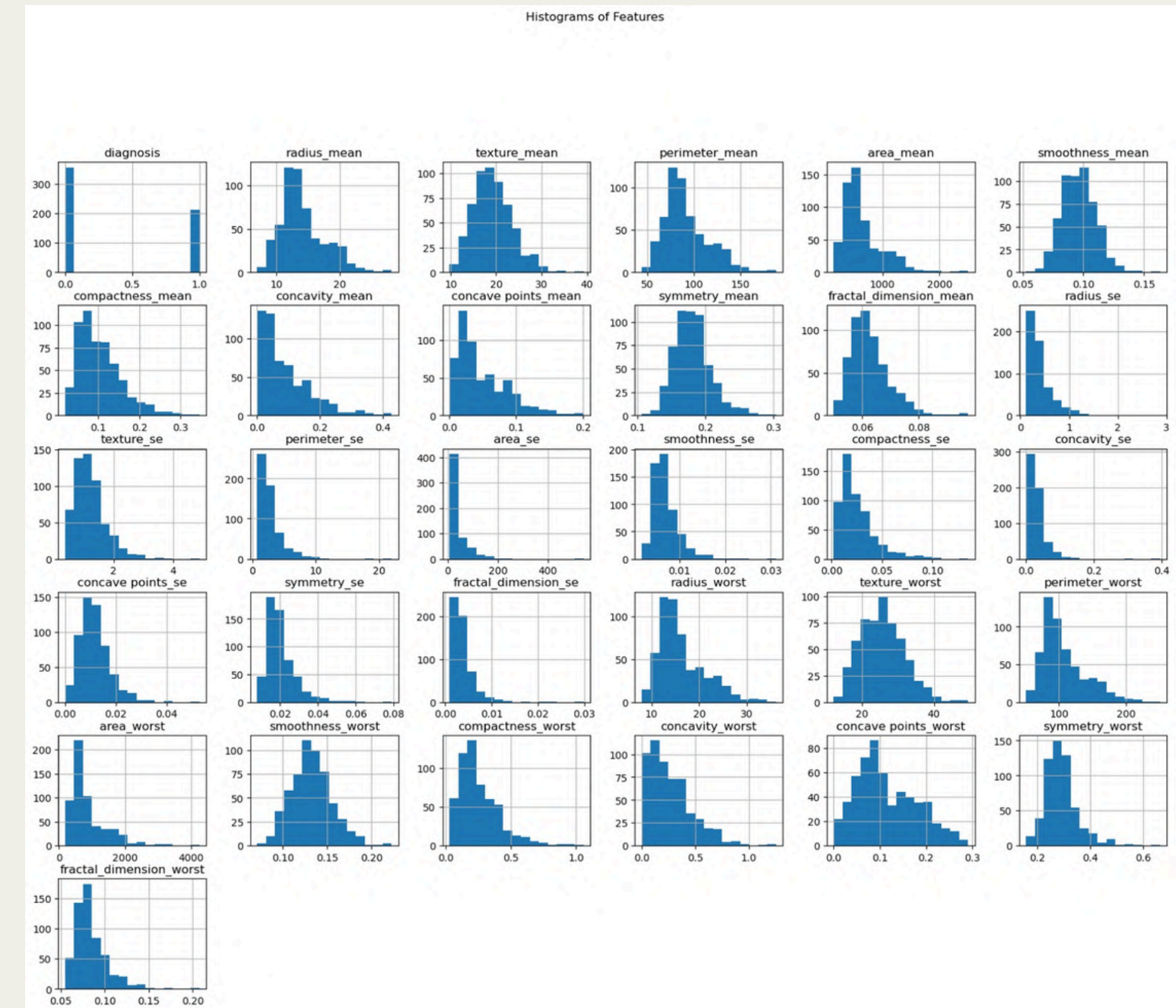
Breast Cancer Detection



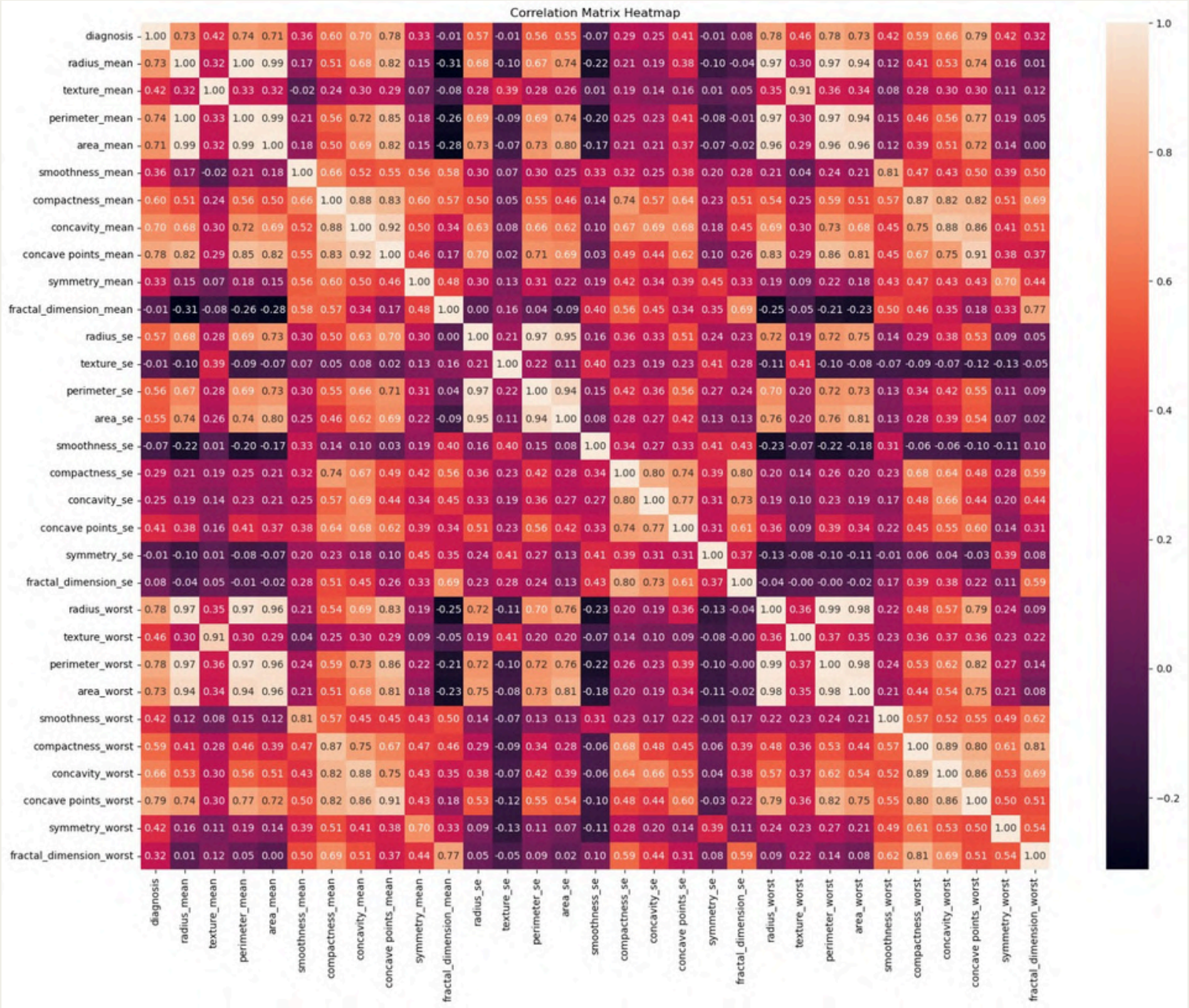
**EARLY DETECTION,
EMPOWERED OUTCOMES.**

SOLUTION

We developed a comprehensive system integrating deep learning models for mammogram analysis, machine learning models for report-based prediction, and a user-friendly web interface for seamless interaction. With ML model accuracy 98% and DL model accuracy 81%.



SOLUTION



ML model for reports



DL model for mammogram

W O W F A C T O R S

Comprehensive approach: We combine mammogram and report analysis for a more accurate diagnosis.

Cutting-edge technology: Our state-of-the-art AI models ensure the best possible results.

IBM Z power: Our system is built on a powerful platform, guaranteeing speed and reliability.

User-friendly interface: Our web app is easy to use, making it accessible to everyone.

Impactful results: We're helping to save lives by providing early detection and accurate predictions.

Let's Jump into the Demo!

ARE YOU READY?

LEARNINGS DURING THE DATATHON

- Python Version Compatibility
- GPT Limitations
- Data Quality and Preprocessing
- Collaboration and Teamwork

Thank you!

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