DECTECTION OF TYPES OF CANCER

PROJECT REPORT

1. What types of lung cancer are you focusing on?

AI can be trained to detect various types of lung cancer like small cell lung cancer (SCLC) and non-small cell lung cancer (NSCLC). Understanding the specific type helps define the model's accuracy, training dataset, and imaging methods.

2. What kind of imaging data do you have available (e.g., CT scans, X-rays, PET scans)?

High-quality imaging data is essential. CT scans are typically better for lung cancer detection than standard X-rays, but AI can be trained on both.

3. Are you interested in using AI for early detection or staging?

Early detection involves identifying minute changes in imaging data, while staging would involve more complex analysis to classify the progression of the disease.

4. Do you need real-time analysis, or can the results be processed later?

Real-time processing requires faster algorithms, while post-processing can afford more computational complexity and accuracy.

5. Do you have any concerns about AI interpretability?

Some clinicians prefer AI systems that provide insights into their decision-making processes, while others may prioritize outcomes over interpretability.

6. How do you plan to measure the success of the AI system?

It's important to align expectations on what success looks like—whether it's more accurate diagnoses, quicker turnaround times, or improved patient care.

7. What concerns do you have about AI bias?

Diverse datasets help reduce bias. Ensuring representation of different age groups, ethnicities, and genders is essential for equitable results.

8. Do you have access to patient outcomes for follow-up studies?

Post-deployment follow-ups on actual patient outcomes can help refine the model and ensure it remains accurate over time.

9. What is your budget and timeline for deploying this AI solution?

Understanding resource constraints helps in scoping the project, choosing the right algorithms, and determining how quickly the solution can be brought to market.

10.What are your expectations for human oversight of the AI system?

In most cases, AI serves as an assistive tool for clinicians, but some applications may allow for autonomous AI decisions in certain scenarios.

11. Is your data labelled by medical professionals (e.g., radiologists)?

Accurate annotations are critical. Radiologist-labelled data provides the ground truth for model learning.

12. How large is your dataset for training the AI?

For deep learning models, more data improves performance. Having a larger dataset reduces bias and improves generalization.

13. What level of accuracy or sensitivity are you expecting?

This helps determine the model's priorities. Some clients may prefer a sensitive system that flags many potential cases, while others may prefer fewer false positives, even if some cases are missed.

14. Do you need real-time analysis, or can the results be processed later?

Real-time processing requires faster algorithms, while post-processing can afford more computational complexity and accuracy.

15. What regulatory considerations or compliance issues are important to you (e.g., FDA, HIPAA)?

Ensuring compliance with health data regulations like HIPAA or obtaining FDA approval may affect the design and deployment timeline.

16.Are you considering integrating the AI with existing hospital systems (e.g., PACS, EHRs)?

Integration with hospital systems such as Picture Archiving and Communication System (PACS) or Electronic Health Records (EHR) ensures a seamless workflow and broader use of the AI solution.

17.Do you have the necessary IT infrastructure to support AI implementation?

Yes, we have a robust IT infrastructure, or we are open to recommendations for improvement.

18. What’s your timeline for developing and deploying the AI system?

We expect development to take [number] months, with deployment following shortly after.

19. Do you have a budget allocated for this AI project?

Yes, we have set aside [amount] for the development and deployment of this system.

20. What’s your strategy for scaling this AI solution in the future?

We aim to deploy this across multiple healthcare facilities once the initial pilot is successful.

21.

Will there be any training programs to familiarize radiologists with the AI tool?

Yes, we will provide comprehensive training and support for all radiologists using the AI system.

22. Do you expect your radiologists to have any concerns about using AI?

Some may be concerned about job security or the reliability of AI predictions.

23. concern regarding AI replacing human radiologists?

The AI is intended to assist radiologists, not replace them, improving their workflow and diagnostic accuracy.

24. How will you address patient privacy and data security?

We will follow HIPAA and GDPR guidelines to ensure patient data privacy and security.

25. Are you concerned about biases in the AI model?

Yes, ensuring that the model works equally well across different demographic groups is critical.

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