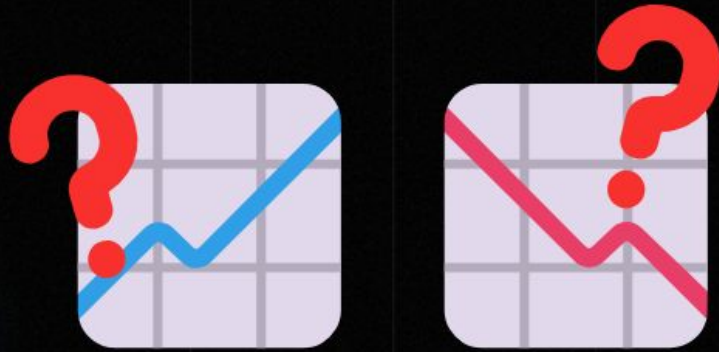


How much does
the survival rate
change?



How much does
the survival rate
change?

Stage I

54%



Stage IV

6%



Detecting Lung Cancer with AI and CT Scans

By: Sai Siddhish Chandra Sekaran

Table of contents

01

Introductory
Information

02

Internship

03

Research

04

Conclusion

Table of contents



01

Introductory
Information

02

Internship

03

Research

04

Conclusion



Table of contents



01

Introductory
Information

02

Internship

03

Research

04

Conclusion



Table of contents



01

Introductory
Information

02

Internship

03

Research

04

Conclusion





01 & 02

Introduction &
Internship

About Me



It's me!

Sai Chandra

- A CS & AI enthusiast
- Coding since I was 6
- Interested in creating an impact

Space + AI

Research at my internship

- Using AI and wavelength data
- Find out information about distant galaxies
- Chance to learn a lot about AI



UMBC

My mentorship site

Space + AI

Research at my internship

- Using AI and wavelength data
- Find out information about distant galaxies
- Chance to learn a lot about AI



UMBC

My mentorship site

Space + AI

Research at my internship

- Using AI and wavelength data
- Find out information about distant galaxies
- Chance to learn a lot about AI



UMBC

My mentorship site



03 Research

Small Gist:

- Earlier detection of lung cancer
- Uncommon AI modeling techniques

I/M Research

What?

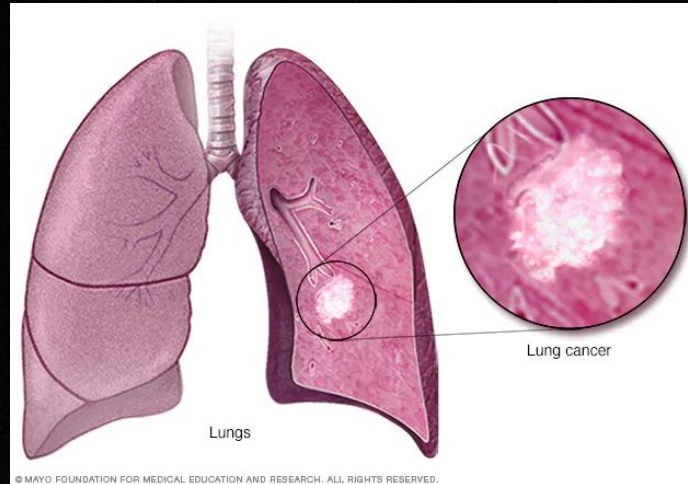
Modeling techniques for detecting lung cancer.

Image from
www.mayoclinic.org/diseases-conditions/lung-cancer/symptoms-causes/syc-20374620

Why?

- AI models made are often never actually used
- Kills millions per year

Lung Cancer: Rapid, uncontrolled growth of cells in the lungs
AI/ML: A smart & adaptive computer that uses data



I/M Research

What?

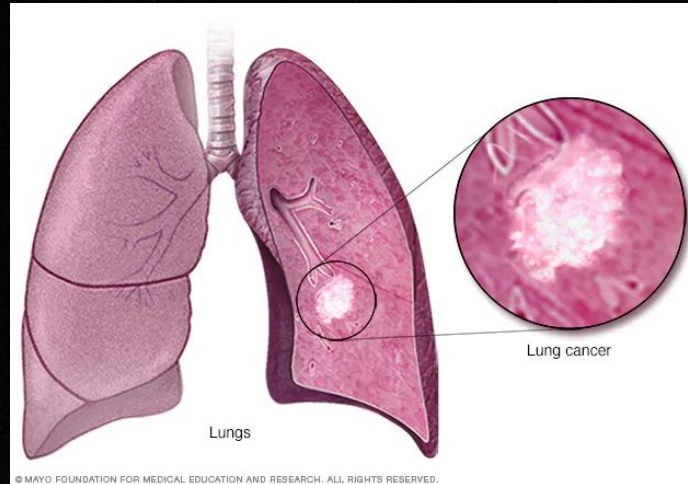
Modeling techniques for detecting lung cancer.

Image from
www.mayoclinic.org/diseases-conditions/lung-cancer/symptoms-causes/syc-20374620

Why?

- AI models made are often never actually used
- Kills millions per year

Lung Cancer: Rapid, uncontrolled growth of cells in the lungs
AI/ML: A smart & adaptive computer that uses data



I/M Research

Is ensemble modeling
better than normally
thought of AI?

Ensemble modeling:
Combination of multiple AI
models

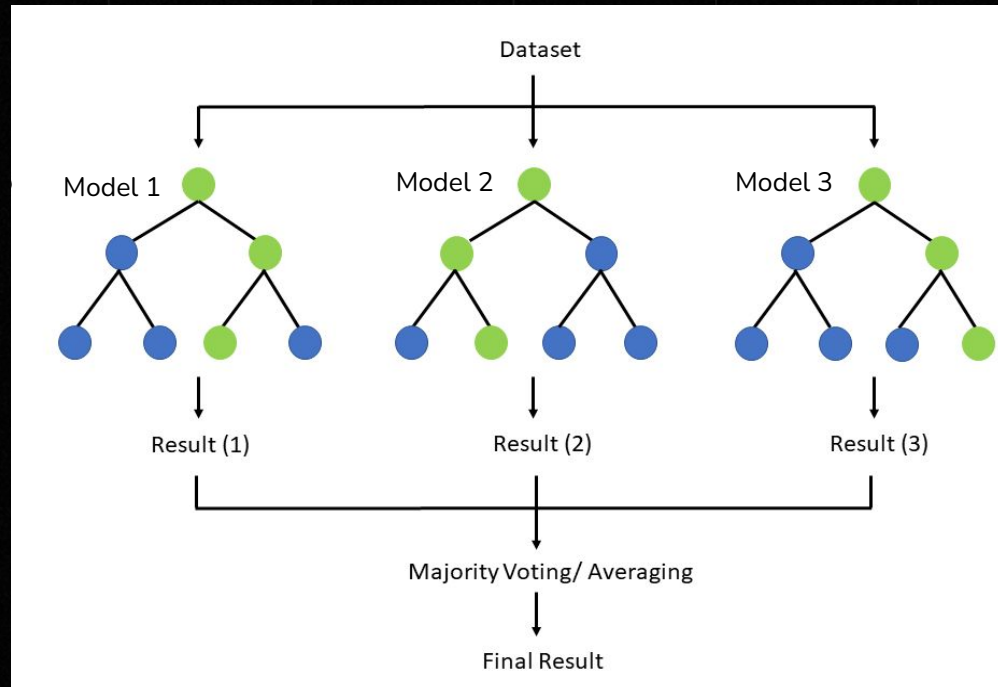
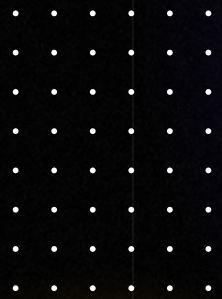


Image from
[en.m.wikipedia.org/wiki/
File:Random_forest_e
xplain.png](https://en.m.wikipedia.org/wiki/File:Random_forest_explain.png)

The background features a dark blue gradient with several thin, wavy lines in shades of purple and blue. A 5x10 grid of white dots is positioned in the top-left corner.

04 Conclusion

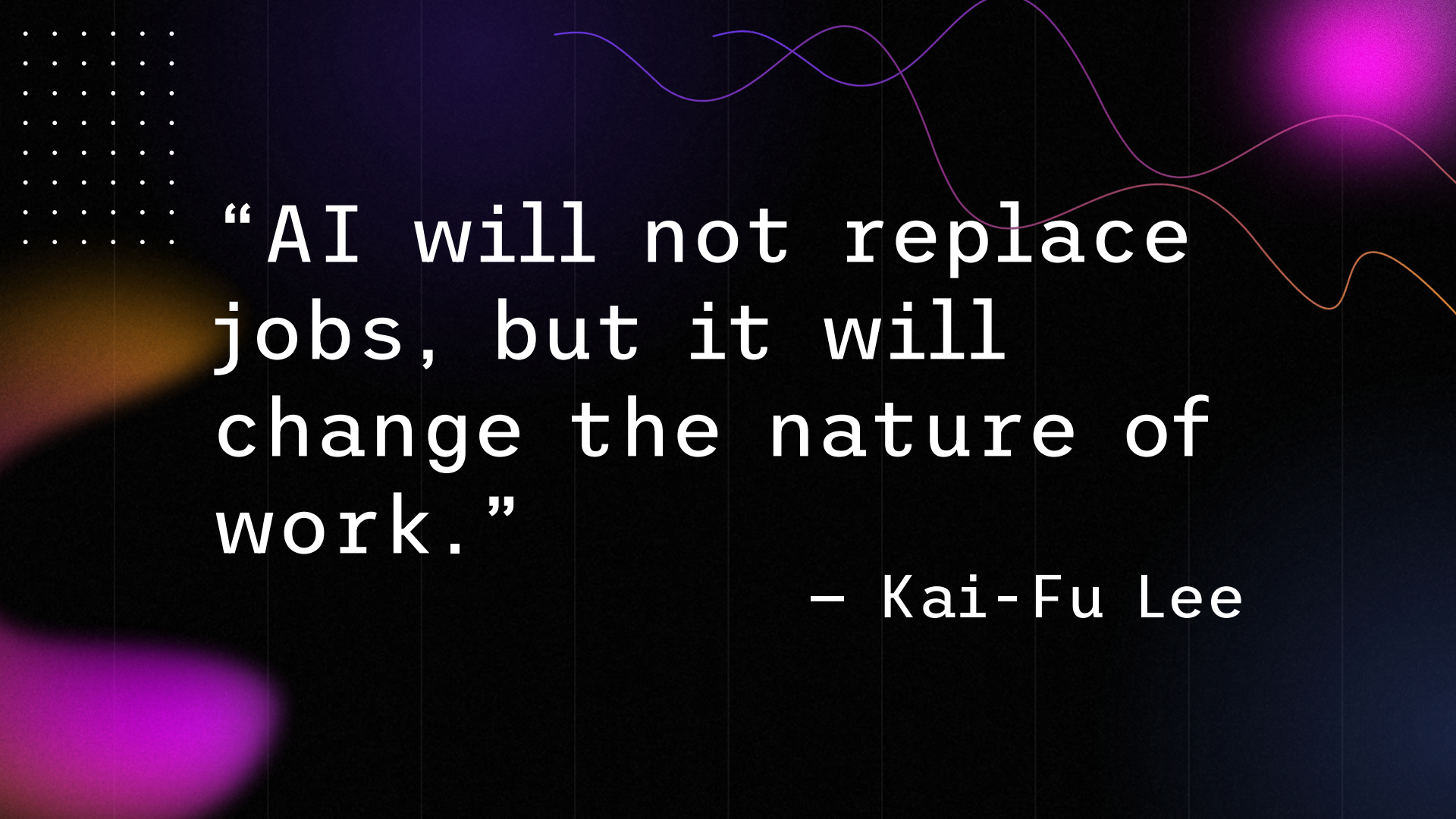
Recap

Research for I/M

I research the earlier
detection of lung cancer

Ensemble Modeling

A large ensemble model
with good balance of
speed and accuracy



“AI will not replace
jobs, but it will
change the nature of
work.”

– Kai-Fu Lee

Thank you!

Are there any questions?

Works Cited:

GeeksforGeeks. (2024, September 9). Introduction to Convolution Neural Network. GeeksforGeeks. Retrieved October 7, 2024, from www.geeksforgeeks.org/introduction-convolution-neural-network/

GeeksforGeeks. (2023, December 26). A Comprehensive Guide to Ensemble Learning. GeeksforGeeks. Retrieved October 7, 2024, from www.geeksforgeeks.org/a-comprehensive-guide-to-ensemble-learning/

CREDITS: This presentation template was created by **Slidesgo**, and includes icons by **Flaticon**, and infographics & images by **Freepik**

Please keep this slide for attribution

A. R., B., & Kumar R. S., V. (2022). Deep learning-based lung cancer classification of CT images using augmented convolutional neural networks. ELCVIA Electronic Letters on Computer Vision and Image Analysis, 21(1). <https://doi.org/10.5565/rev/elcvia.1490>

World Health Organization. (2023, June 26). Lung cancer [Fact sheet]. World Health Organization. Retrieved October 7, 2024, from <https://www.who.int/news-room/fact-sheets/detail/lung-cancer>



