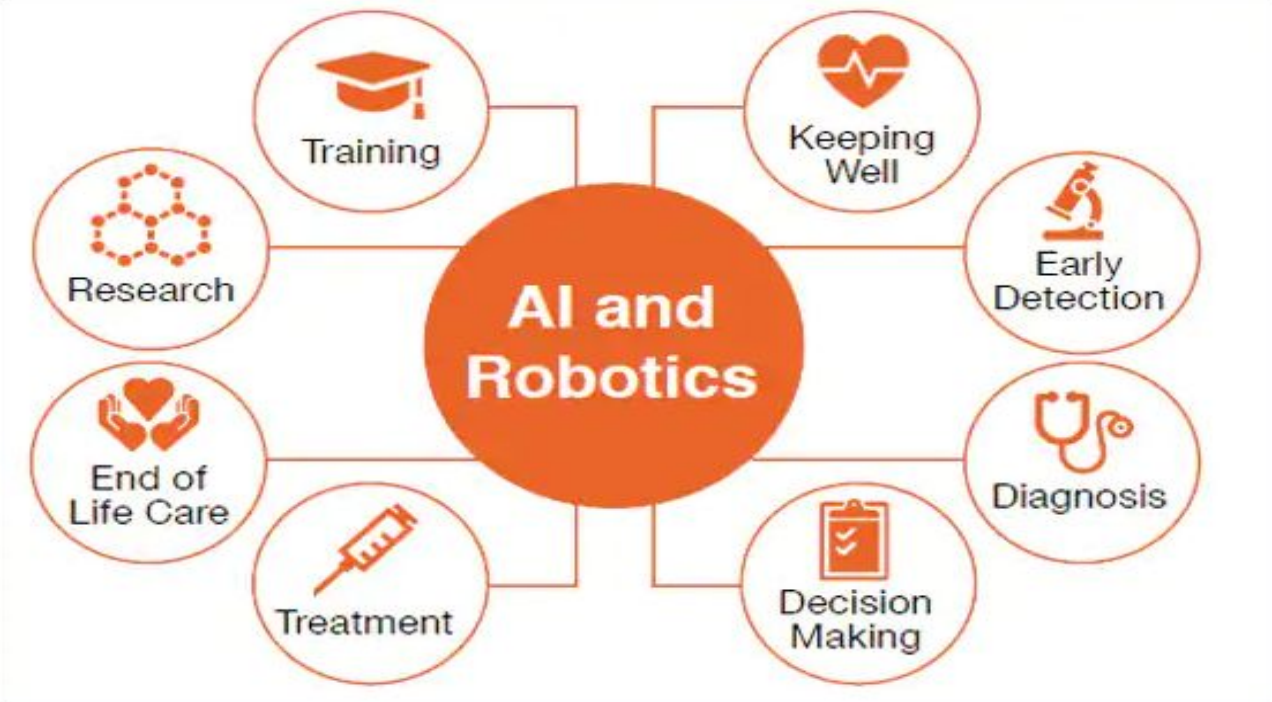
# AI IN HEALTHCARE

Harsh Maniar, Ameya Hampihallikar,
Rishabh Tiwari

# Places AI is applied in Healthcare




- AI has shown itself to be useful in detecting diseases and early types of cancer and blood pressure in their preliminary stages. AI in combination with consumer wearables and other medical devices like BP monitors.
- The use of AI has also helped in analysis of mammograms to upto 30 times faster with an accuracy of upto 99%.


- IBM Watson and Google's DeepMind Health has been useful for healthcare organizations.
- It is used to review and manage medical journals, symptoms and case studies of treatment exponentially faster than humans and in combination with neuroscience to build algorithms that act the human brain.


- The alignment of big health data with correct and timely decisions is necessary for improving health care and AI has shown improvements in predictive analytics which support clinical decision making.
- Pattern recognition is a big application of AI for decision making in cases of patients who are at risk of developing a condition.


- IOT, more specifically Internet of Medical Things (IOMT) is a common application of AI in consumer health applications. This helps patients in remaining healthy and decreasing the frequency of their visits to the doctor.
- These IOMT devices allow clinicians to better understand a patient due to more data from their day to day lives.


- AI has helped clinicians take a more thorough approach for disease management and help patients to better manage their treatment programmes.
- Highly complex surgical robots are in hospitals and labs for repetitive tasks, in rehabilitation and physical therapy with the help of AI.


- Due to better medical care now than ever, people of this generation are newly plagued by loneliness in the later phases of their life.
- AI has allowed advancements in both humanoid robots as well as voice assistants like Siri and Google Assistant which help with tasks around the home.


- AI allows those in health care training to go through simulations in a way that simple computer-driven algorithms and applications cannot.
- Training applications can learn from previous responses, so that the challenges can be continually adjusted to meet learning needs.


- Drug research and discovery is one of the more recent applications for AI in healthcare.
- Latest advances in AI have allowed for greater efficiency in costs and time for both drug discovery and repurposing.

# What AI technologies are mainly used in Healthcare?


# NLP in Healthcare

## Associated Use Cases

**Mainstay use cases of NLP in Healthcare that have a proven ROI**

- Speech Recognition
- Improvement in Clinical Documentation
- Data Mining Research
- Computer-assisted Coding
- Automated Registry Reporting

# Emerging use cases of NLP in Healthcare that will have an immediate impact

Clinical Trial Matching

Prior Authorization

Clinical Decision Support

Risk Adjustment and Hierarchical Condition Categories

# Next-gen use cases of NLP in Healthcare that are on the horizon

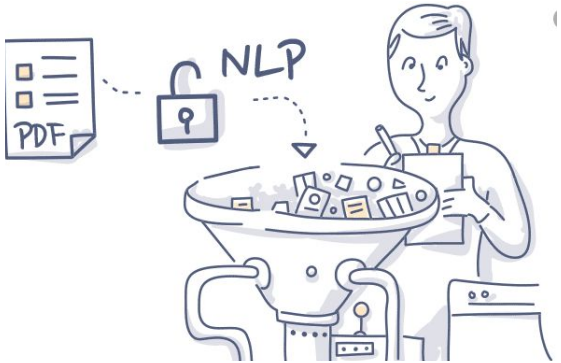
Ambient Virtual Scribe

Computational Phenotyping and Biomarker Discovery

Population Health Management & Analysis

# Immediate Benefits of leveraging NLP

1. Improves patient interactions with the provider and the Electronic Health Record
2. Increases patient health awareness
3. Improves care quality



# ADVANTAGES OF USING COMPUTER VISION IN THE HEALTHCARE INDUSTRY

EARLY DISEASE RECOGNITION

AUTOMATIC GENERATION OF MEDICAL REPORTS

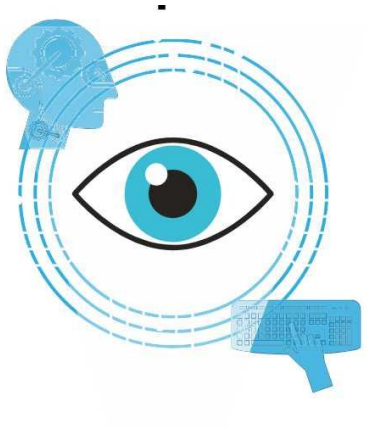
A MORE ACCURATE METER

ENHANCED MEDICAL PROCEDURES EFFICIENCY

INTERACTIVE MEDICAL IMAGING

# Impact of Computer Vision

1. Diagnosing diseases from images
2. Generating reports from images (ECG, EEG etc.)
3. Creating interactive imaging models



# Leading companies leveraging AI in Healthcare





# THANK YOU!

Questions?

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