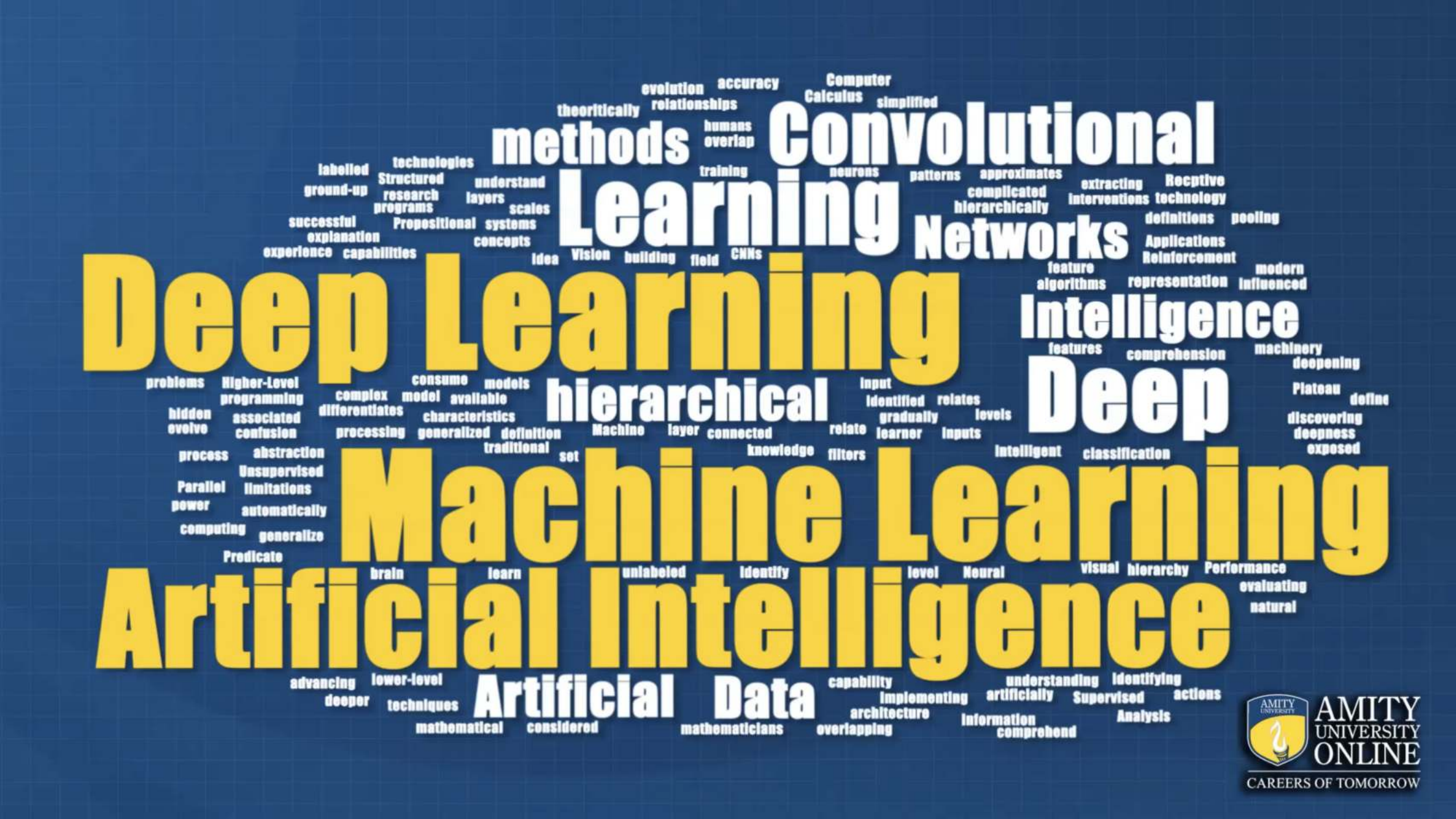
MACHINE LEARNING & ARTIFICIAL INTELLIGENCE

INTRODUCTION TO PROGRAM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training
neurons
patterns
approximates
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complicated
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Propositional
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Networks
Applications
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idea
Vision
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CNNs
Reinforcement
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modern
Deep Learning
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Intelligence
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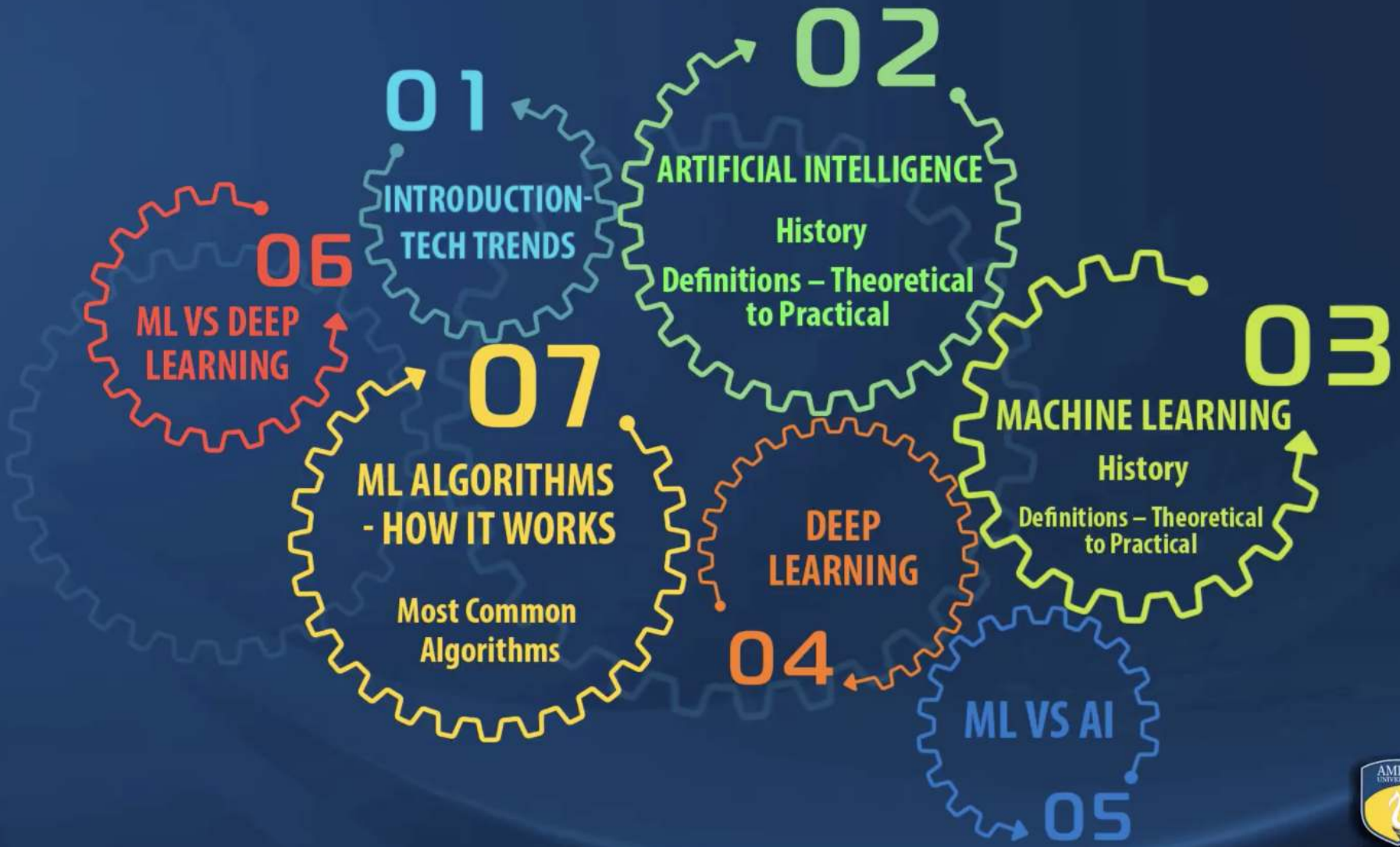

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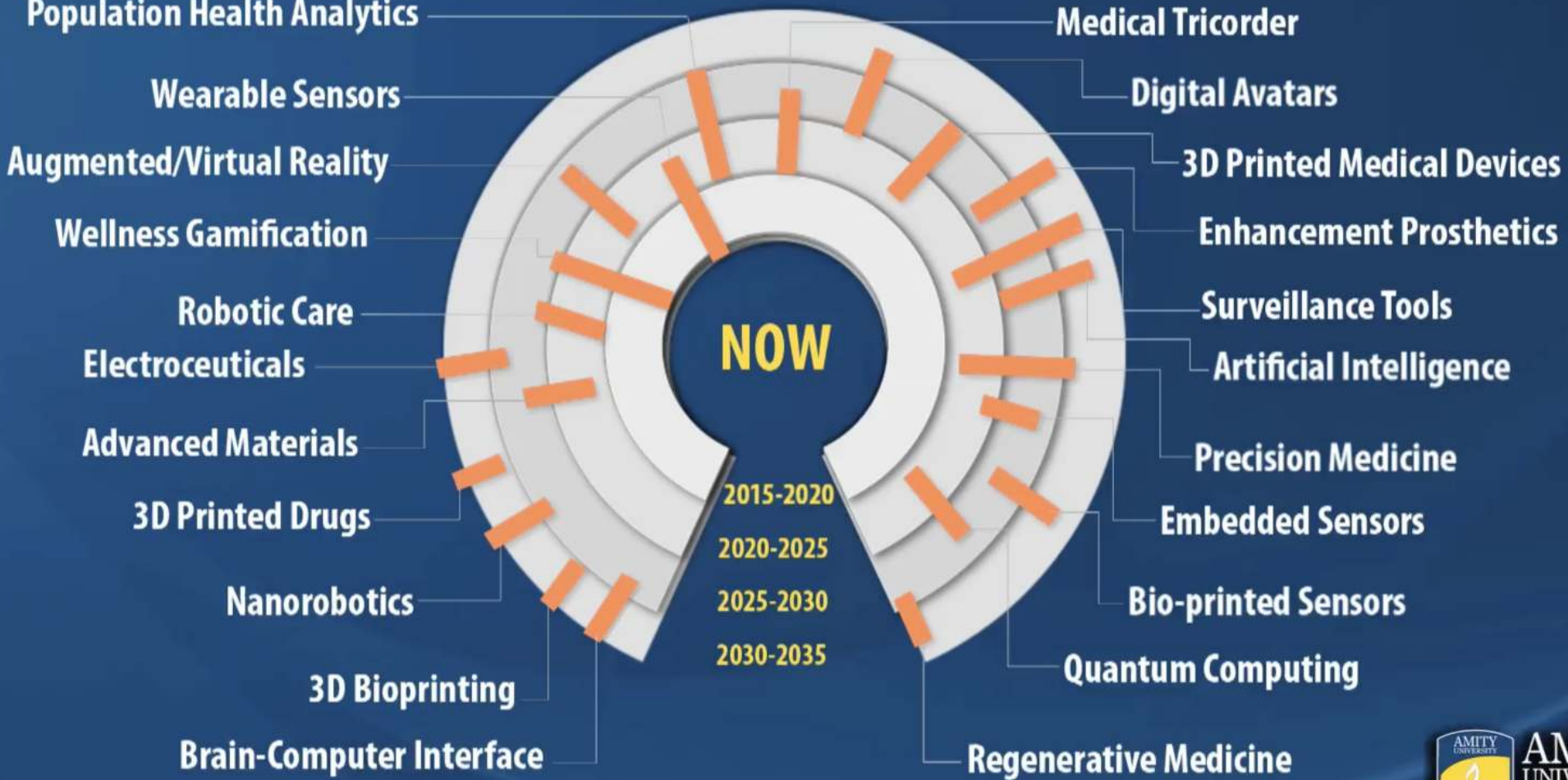
TECHNOLOGY LANDSCAPE - PAST, CURRENT & FUTURE



Source: Frost & Sullivan

*Bars represents the horizon for technology commercialization and maturation

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FUTURE WORK SKILLS 2020

KEY

Drivers - disruptive shifts that will reshape the workforce landscape

Key skill needed in the future workforce

Novel and adaptive thinking

New media literacy

Cross cultural competency

Design mindset

Sense-making

Social intelligence

Trans-disciplinarily

Cognitive load management

Computational thinking

Virtual collaboration

RISE OF SMART MACHINES AND SYSTEMS

Workplace robotics nudge human workers out of rote, repetitive tasks

EXTREME LONGEVITY

Increasing global lifespans change the nature of careers and learning

COMPUTATIONAL WORLD

Massive increase in sensors and processing power make the world a programmable system

SUPERSTRUCTURED ORGANIZATIONS

Social technologies drive new forms of production and value creation

NEW MEDIA ECOLOGY

New communication tools require new media literacies beyond text

GLOBALLY-CONNECTED WORLD

Increased global interconnectivity puts diversity and adaptability at the center of organizational operations

While all six drivers are important in shaping the landscape in which each skill emerges, the color-coding and placement here indicate which drivers have particular relevance to the development of each of the skills.

12 DISRUPTIVE TECHNOLOGIES

that can make an impact by 2025

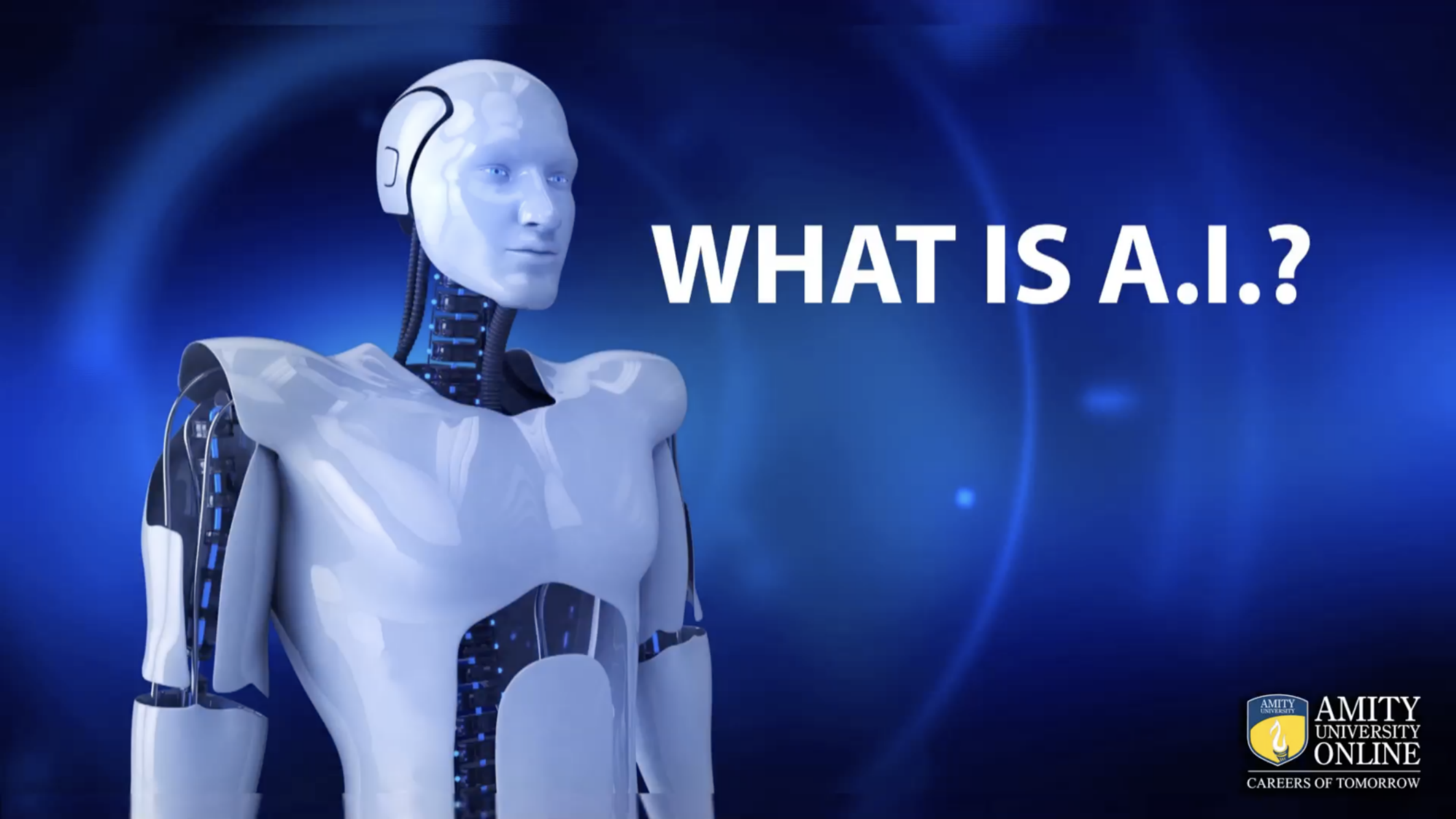
0 1 2 3 4 5 6 7 8 9 10 11

- Mobile Internet
- Automation of knowledge work
- Internet of Things
- Cloud
- Advanced robotics
- Autonomous and near-autonomous vehicles
- Next-generation genomics
- Energy storage
- 3-D printing
- Advanced materials
- Advanced oil and gas exploration and recovery
- Renewable energy

$100 trillion

Size of global economic output estimated in 2025

Source: www.dnaindia.com


WHAT IS A.I.?
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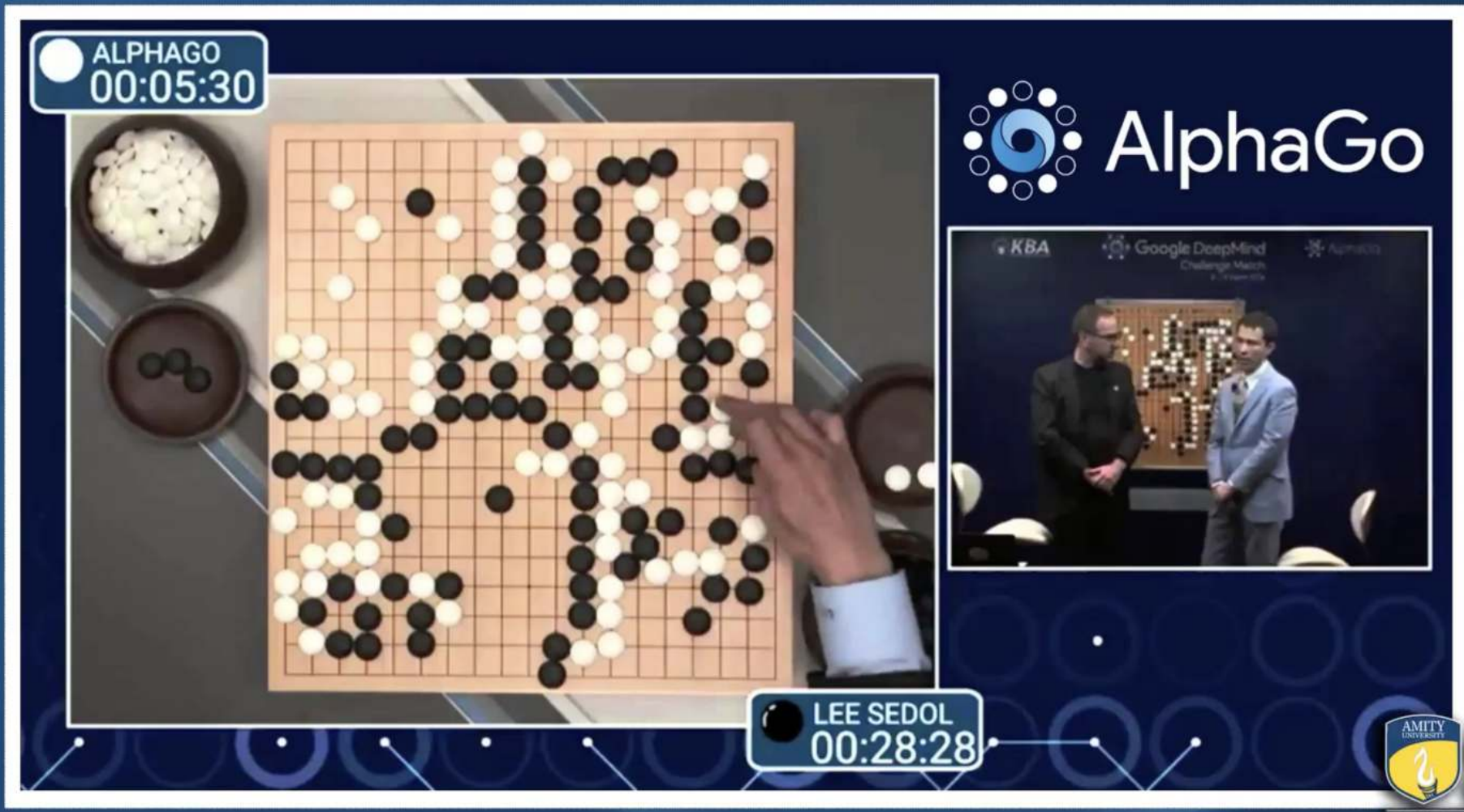
Astonishing Feat - AlphaGo



ASTONISHING FEAT

Following claim was made in New York Times – 1997

> "It may be a hundred years before a computer beats humans at Go —maybe even longer,"
> - Piet hut, an astrophysicist

- Prediction – Computer would beat Go player in 2097
- Actual – Computer beat Go player 100 years earlier