WELCOME TO #WCETWEBCAST

February 15, 2018

The webcast will begin shortly.

There is no audio being broadcast at this time.

An archive of this webcast will be available on the WCET website next week.

THE PROMISE AND PERIL OF ARTIFICIAL INTELLIGENCE FOR TEACHING AND LEARNING

February 15, 2018

WELCOME!

Use the question box for questions and information exchange.

Archive, PowerPoint, and Resources available will be next week.

PowerPoint can be downloaded in the handouts pane.

Follow the Twitter feed: #WCETWebcast.

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OVERVIEW

01
What is Artificial Intelligence?

02
How is Artificial Intelligence Being Used in Higher Ed?

03
How Do We Manage the Growing Presence of Artificial Intelligence?

04
Summary

QUESTIONS FROM THE AUDIENCE

If you have a question during the presentation, please add your questions to the question box.

We will monitor the question box and have time for Q&A at the end of the presentation.

MODERATOR

David Dannenberg

Director, Academic Innovations & eLearning,

University of Alaska Anchorage

Steering Committee Member,

WCET

PRESENTER

Bryan Fendley
Director of Instructional Technology,
University of Arkansas at Monticello

WHAT IS ARTIFICIAL INTELLIGENCE?

"A transformative technology that holds promise for tremendous societal and economic benefit."

The National Artificial Intelligence Research and Development Strategic Plan, 2016

MEGATREND

"GARTNER IDENTIFIES THREE
MEGATRENDS THAT WILL DRIVE DIGITAL
BUSINESS INTO THE NEXT DECADE."
GARTNER,

HOW TO AVOID DRINKING FROM A FIREHOSE

Photo by Hermes Rivera on Unsplash

DEFINING AI

- Exhibits behavior that is commonly thought of as requiring intelligence.

- Capable of rationally solving complex problems

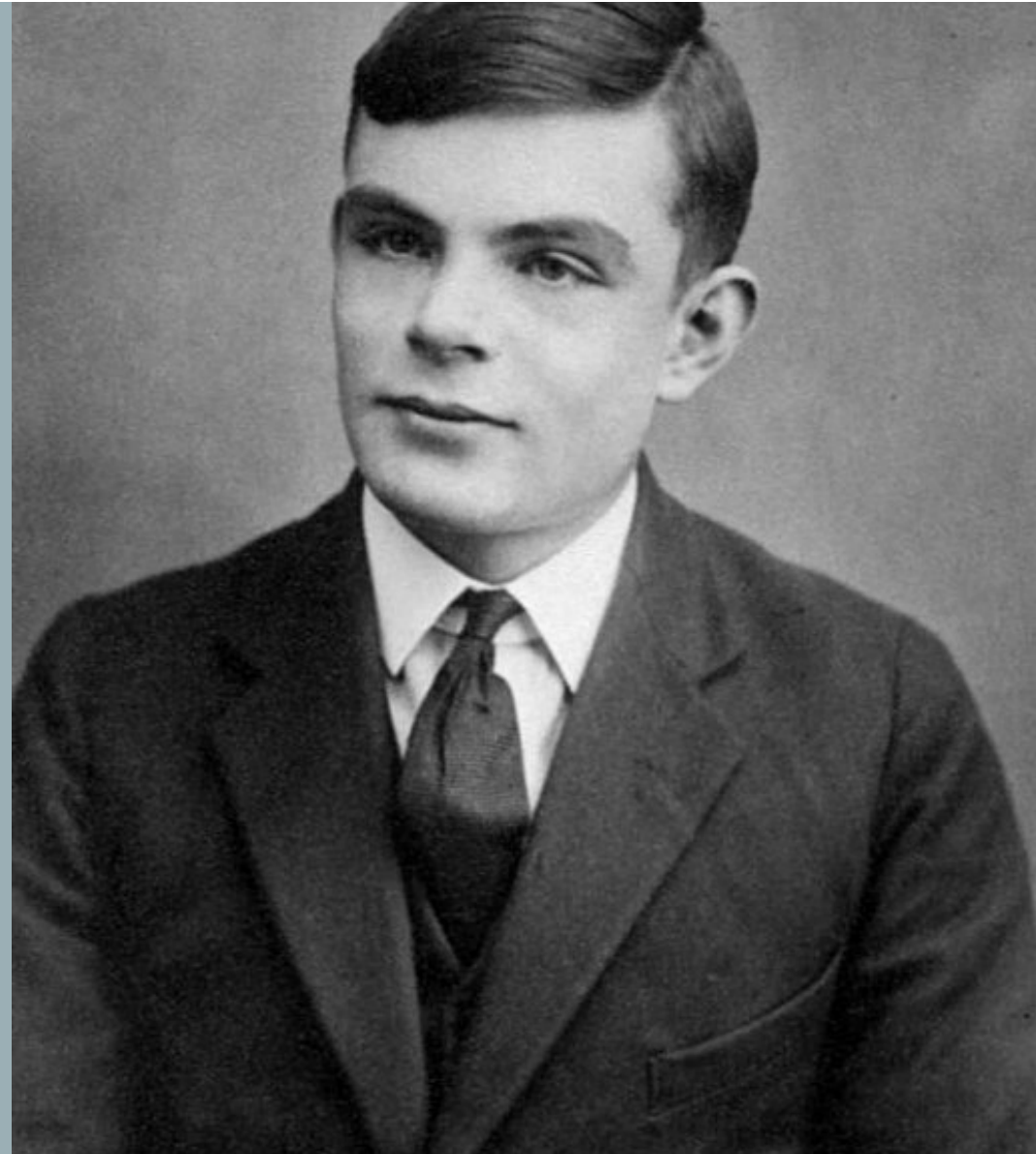PREPARING FOR THE FUTURE OF ARTIFICIAL INTELLIGENCE OF ARTIFICIAL INTELLIGENCE. (2016).

HISTORY OF AI

ALAN TURING

HOW DID AI GET STARTED?

- 1950 -1980
- 1980 - 2010
- 2010 - present

The Difference Between AI, Machine Learning, and Deep Learning? | NVIDIA Blog. (2016).

FURTHER DEFINING AI

AI BREAKTHROUGHS

- Self-driving cars

- Switching to statistics

- Natural language processing

- GPUs make AI economical

The 10 most important breakthroughs in Artificial Intelligence. | TechRadar. (n.d.)

CATEGORIES OF AI

- Systems that think like humans
- Systems that act like humans
- Systems that think rationally

PREPARING FOR THE FUTURE OF ARTIFICIAL INTELLIGENCE, (2016).

AI FUNCTIONAL ROLES

- AI performs functions alongside the human
- AI performs functions when the human encounters high cognitive overload
- AI performs functions in lieu of a human

The National Artificial Intelligence Research and Development Strategic Plan, (2016).

WHAT ARE THE DRIVING FACTORS BEHIND AI?

- Maturation of machine learning

- Digital economy

- Consumer demand

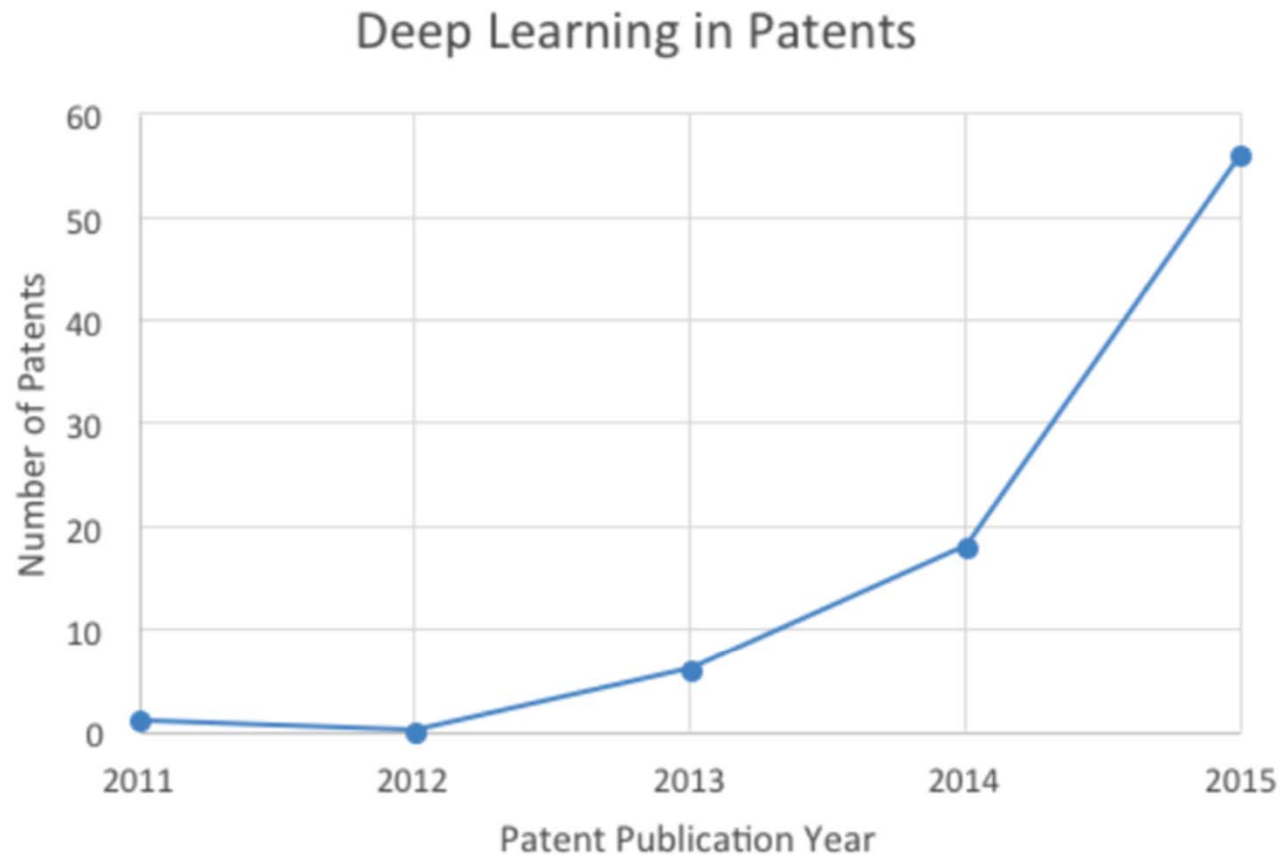ARTIFICIAL INTELLIGENCE AND LIFE IN 2030. (2016).

MACHINE LEARNING

WHAT IS MACHINE LEARNING?

- Types of machine learning

- The importance of data

- Uses of machine learning

Society, T. R. (2017). Machine learning: the power and promise of computers that learn by example, 1–128.

WHAT IS DEEP LEARNING?

Deep Learning in Patents

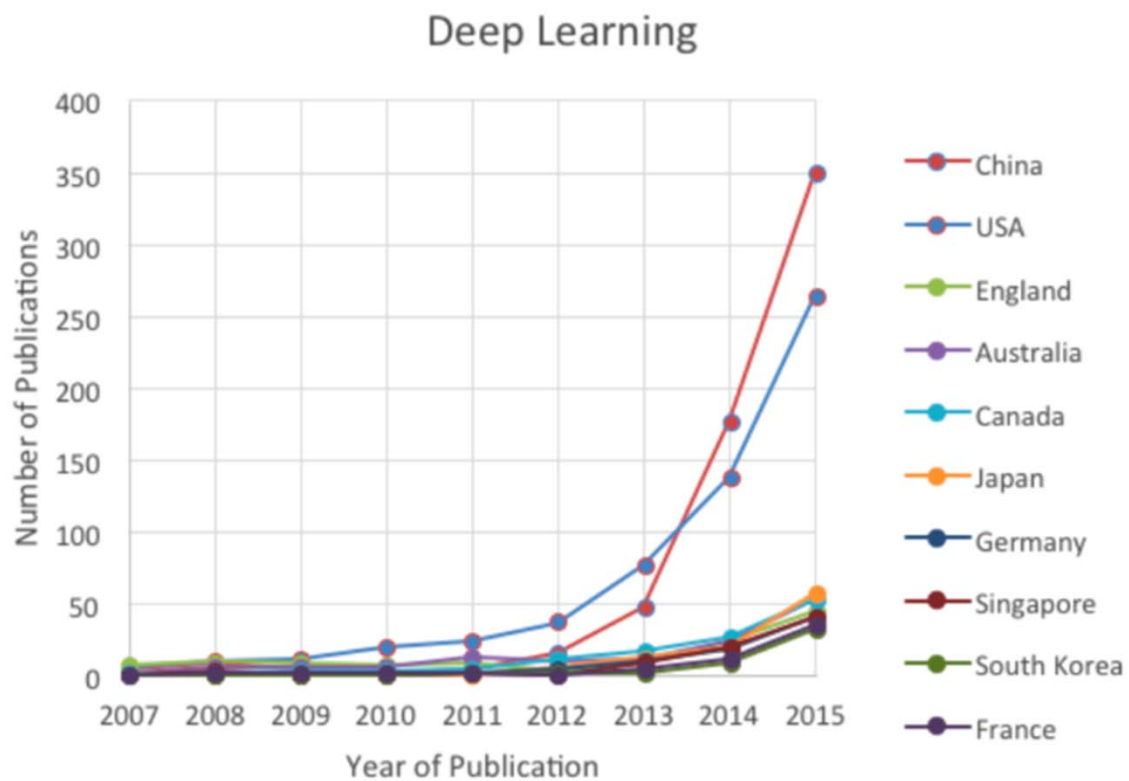**Figure 3: Analysis of number of patents using term "deep learning" or "deep neural net".[64]**

Figure 1: Journal articles mentioning "deep learning" or "deep neural network", by nation.[62]

AI IN HIGHER EDUCATION

ELMO

PROFESSOR EINSTEIN

SOPHIA THE ROBOT

Sophia Awakens Episode 1

https://www.youtube.com/watch?v=LguXfHKsa0c
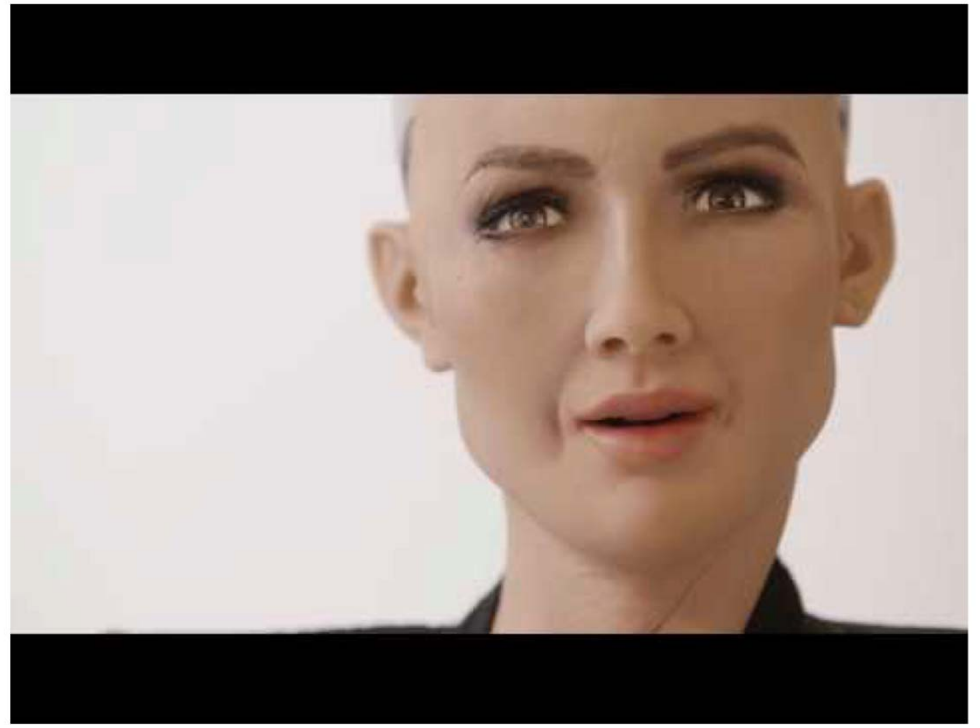
Hanson Robotics

1,429,494 views

Published on Nov 26, 2016

MACHINE LEARNING IN EDUCATION

- Co-bots

- Cognitive agents

- Targeting

PREPARING FOR THE FUTURE PREPARING OF ARTIFICIAL INTELLIGENCE. (2016).

PREPARING THE CAMPUS FOR AI

ABU'S STORY

- https://youtu.be/El4OCwR6qxo

GALLUP POLL

- Students are concerned they won't get jobs

- Workers are concerned about automation taking jobs

2017 College Student Survey. (2018).

Optimism Anxiety Northeastern Gallup. (2018).

AI FUNDING OPPORTUNITIES

AI FUNDING

Announcing the AI Fund: Building transformative AI companies. (n.d.).

Andrew Ng

AI, Machine Learning, Deep learning, Online Education.

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Latest

Andrew Ng
Jan 30 · 3 min read

Announcing the AI Fund: Building transformative AI companies

Dear friends,

I am excited to announce the formation of the AI Fund. We have raised $175 million, and will be sequentially initiating new businesses that use AI to improve human life. As we grow these…

Read more…

AI FUNDING

UC Berkeley — AI Safety Research. (2017).

Organization Name : UC Berkeley

Award Date : 10/2017

Grant Amount : $1,450,016

Purpose : To support a four-year AI safety project led by Anca Dragan and Sergey Levine.

ETHICS

WHAT SHOULD WE BE DOING NOW?

- GDPR

- R&D

- Software

The National Artificial Intelligence Research and Development Strategic Plan, 2016

SUMMARY

- Get past shock
- Look for small wins
- Run pilots
- Find areas where it may already be working

QUESTIONS FROM THE AUDIENCE

CONTACT INFORMATION

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WCET Leadership Summit: Ensuring Ethical and Equitable Access in Digital Learning

http://wcet.wiche.edu/events/summits/ensuring-ethical-equitable-access-digital-learning

June 5-6

Newport Beach, CA

WCET 30th Annual Meeting and Celebration

Call for Proposals will open in March

October 22-24

Portland, OR

ADDITIONAL INFORMATION AND RESOURCES

Access to the resources discussed during this webcast, including
the archive, will be available next week.

http://wcet.wiche.edu/connect/webcasts

UPCOMING WEBCAST

February 28: Post-Secondary Institution Data-Security Overview
& Requirements

http://wcet.wiche.edu/connect/webcasts

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