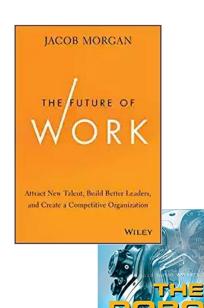
AI and Robotics and The Impact on Public Administration Work Group

NAPA STANDING PANEL ON TECHNOLOGY LEADERSHIP

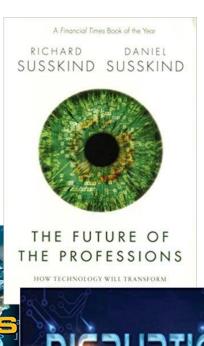




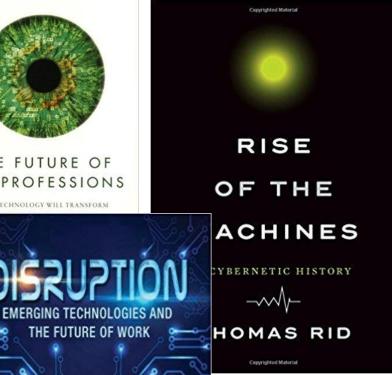


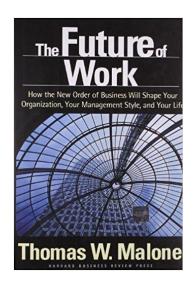
A Human's Survival Guide

to Profiting in the Age of Automation



VICTOR DEL ROSAL



















News > Technology & Science > Robots

Robots 'to take 50% of our jobs by 2050 and outperform humans at almost anything'

Prof Moshe \
lack of direct







TECHNOLOGY

LEADERSHIP

ENTERTAINMENT

IDEAS

/IDI

06.12.15

This Calculator Will Tell You If A Robot Is Coming For Your Job

The answer is yes. The real question is when.



BY ADELE PETERS 3 MINUTE READ



Is a robot coming for your job? Now you can find out via an algorithm, appropriately. A handy calculator from NPR, based on research from





WILL ROBOTS TAKE MY JOB?

ABOUT

Enter your job

or show <u>random example</u>





WILL ROBOTS TAKE MY JOB?

ABOUT

1.5%



Togical matches you with tog developers who are guaranteed to succeed.

ADS VIA CARBON

Chief Executives

90C CODE: 11-1011 00

Determine and formulate policies and provide overall direction of companies or private and public sector organizations within guidelines set up by a board of directors or similar governing body. Plan, direct, or coordinate operational activities at the highest level of management with the help of subordinate executives and staff managers.

AUTOMATION RISK LEVEL

Totally Safe

or 1.5% probability of automation

PROJECTED GROWTH

-1%

ov 2024

MEDIAN ANNUAL WAGE

\$181,210

or \$87.12 hourly

PEOPLE EMPLOYED

223,260

as of 2016











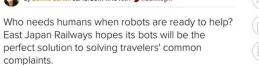
Who Will Be Replaced?

- **→** Janitorial
- **≻**Security
- > Food services
- **≻**Receptionists
- >Help desk























Robots and Autonomous Vehicles are coming!



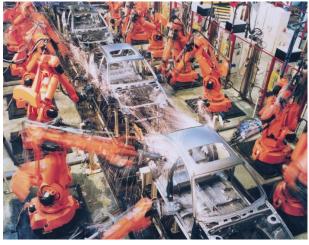










































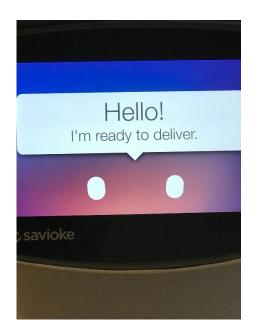


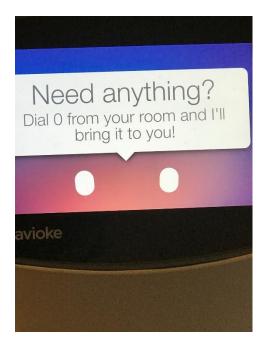
















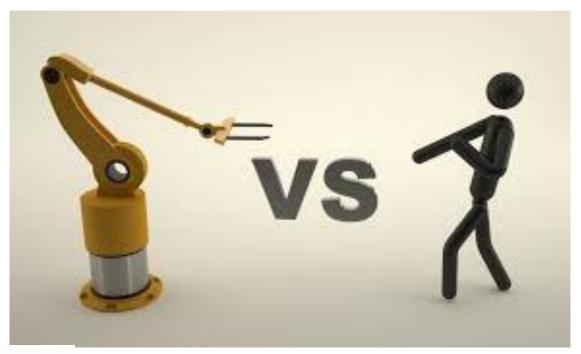
Robots.....

- ➤ Don't call in sick
- ➤ Do not join unions (yet!)
- ➤ Do not need holidays or breaks
- Can work 24/7
- ➤ Never complain
- ➤ Not bothered by repetition
- ➤ Does not put off making decisions!



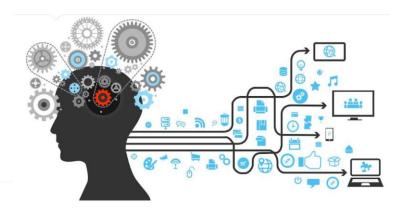


Robotics and Artificial Intelligence









ar·ti·fi·cial in·tel·li·gence

noun

the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.







Intelligent Voice Response and Interaction

















WHAT IT IS

HOW IT WORKS

CALL US: 1.9





Artificial Intelligence is Coming!



VIRTUAL RECEPTIONIST

The PRSONAS Virtual Receptionist greets visitors, presents a searchable staff directory and notifies an employee of a visitor via mobile text message.



PRODUCT SPECIALIST

A hologram Product Specialist from PRSONAS delivers self-service applications, show demo videos, texts customers information and coupons and collects analytics.



VIRTUAL CONCIERGE

A Virtual Concierge hologram from PRSONAS delivers self-service applications, provides way finding directions, checks visitors in and displays videos.



The New York Times

TECHNOLOGY

The Sublime and Scary Future of Cameras With A.I. Brains



Farhad Manjoo

STATE OF THE ART FEB. 27, 2018





















Clever computers

The dawn of artificial intelligence

Powerful computers will reshape humanity's future. How to ensure the promise outweighs the perils

May 9th 2015







"THE development of full artificial intelligence could spell the end of the human race," Stephen Hawking warns. Elon Musk fears that the development of artificial intelligence, or AI, may be the biggest existential threat humanity faces. Bill Gates urges people to beware of it.

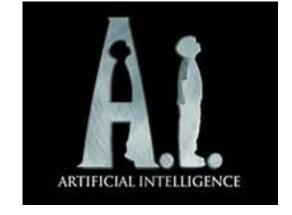
Dread that the abominations people create will become their masters, or their executioners, is hardly new. But voiced by a renowned cosmologist, a Silicon Valley





Artificial Intelligence has grown because of...

- 1. Advancements in complex algorithms.
- 2. Dramatic Increase in speed and computing power.
- 3. Ability to digest data from various sources.
- 4. Ability to store and retrieve massive amounts of data.









7 State or Local Governments Using Amazon Alexa

Uses range from giving advice on driver's license exams to traffic updates, as the list of municipal government skill sets available on the platform continues to expand.

BY ZACK QUAINTANCE / SEPTEMBER 27, 2017











MICROSOFT APPS TECH

Microsoft's new iPhone app narrates the world for blind people

The app uses AI to recognize people, objects, and scenes

By James Vincent | @jjvincent | Jul 12, 2017, 8:41am EDT













9





SOFTWARE

State and Local Governments Tap Chatbots to Slash Staff Workloads

Conversational tools are improvin citizen engagement and freeing uppersonnel to focus on innovation.

by Kevin Cucuel



Kevin Cucuel is a Sr. Business Development Strategist for State and Local Government at CDW–G. With a passion for aligning CDW's strengths to our customer's needs, Kevin focuses on the insertion of IT solutions into segment sub verticals and leads emerging market discussions.





A chatbot (also known as a talkbot, chatterbot, Bot, chatterbox, IM bot, interactive agent, or Artificial Conversational Entity)



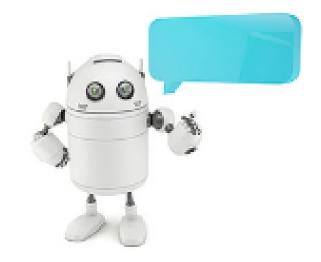




Are Chatbots the Next mHealth Frontier?

BY LINDY DREYER AND TOREY VANEK : NOVEMBER 17, 2016 : CONTENT,

In April, Facebook made it possible for organizations to use chatbots to send and receive messages from users of Facebook Messenger. That's a big deal. Facebook



Messenger is now used by 900 million people every month. As the name implies, it's a messaging platform that people use to send short messages to each other through [...]

READ MORE --







World's First Al Citizen in Saudi Arabia Is Now Calling For Women's Rights

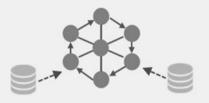
It's a little ironic if you think about it.



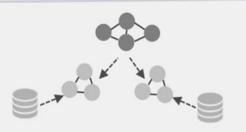
NATIONAL ACADEMY OF PUBLIC ADMINISTRATION® an the Kingdom of Saudi Arabia granted a citizenship to Hanson otics' female-looking robot Sophia, most thought it was just to appeal to the audience of the Future Investment Initiative.



Stage 3: Machine Consciousness



Stage 2: Machine Intelligence



Stage 1: Machine Learning



Cognitive. Self-learning.

Advanced network trained to build ad-hoc models to learn from custom data.









User driven big data models for machine learning.

Three Stages of Al





We're here

Now!





Guardian CareersFuture of work

Will jobs exist in 2050?

Sophisticated machines are fast outpacing jobs. What does this mean for the future of work? And if there are no jobs, what we will do with our time?

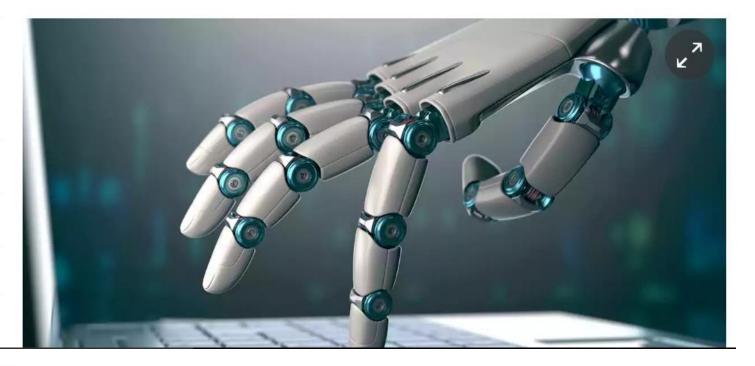
Charlotte Seager

y @CharlotteSeager

Thursday 13 October 2016 02.00 EDT











Robotics, AFI - Impact on Government

1

Payroll taxes will decrease as the human work force shrinks.

2

Sales tax revenue declines due to less spending.

3

Real estate taxes will decline as there will be less need for "offices".





What Can Government Do?

1

Consider taxing robots as humans.

2

Consider training and retraining of workforce. 3

Attract or Expand Community Colleges.

4

Need for new zoning & liability laws and regs for autonomous vehicles.





They Are Already Here...

- ➤ Drones
- ➤ Cyber security network monitoring
- ➤ Automated answering systems
- ➤ Robots as greeters
- ➤ Policing predictive crime analytics
- ➤ Bomb detection robots
- ➤ loE monitoring devices
- ➤ Video surveillance monitoring systems
- >Anticipatory engagement
- ➤ Voice interaction: Siri, Cortana, Alexa, Google Assistant
- **≻**Chatbots
- > Autonomous vehicles
- ➤Other?



Impact On Society

Will remove mundane repetitive work.

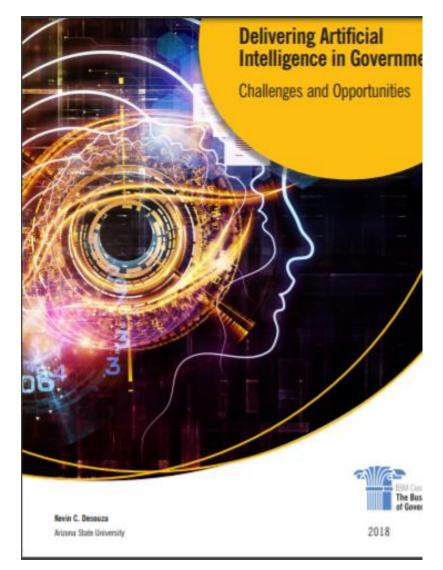
Need to rethink selfworth in a society that defines us by what we do.

Need to re-think wealth redistribution.*

Need to rethink the nature of work, self actualization, and selfrespect.











Issues

- Future of work
- Decision making
- Ethics
- Security
- Citizen engagement
- Planning
- Predicting
- Human override
- Other?





Discussion





