AI Predictions for 2016

by Dr Andy Pardoe
Founder of homeAI.info & Informed.AI
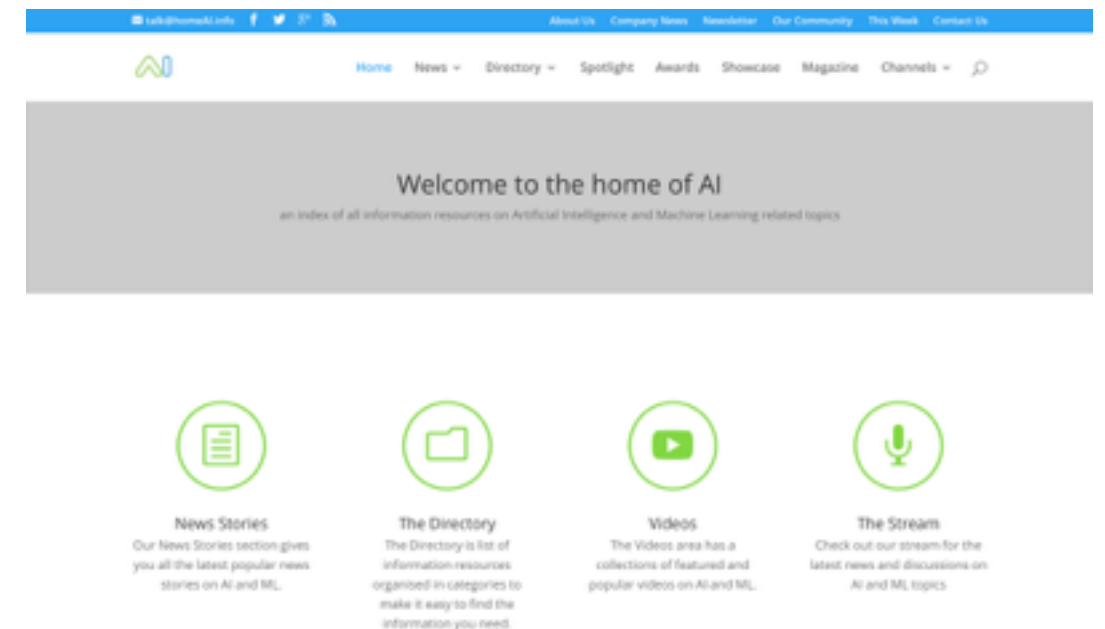

homeAI.info
THE HOME OF AI INFORMATION
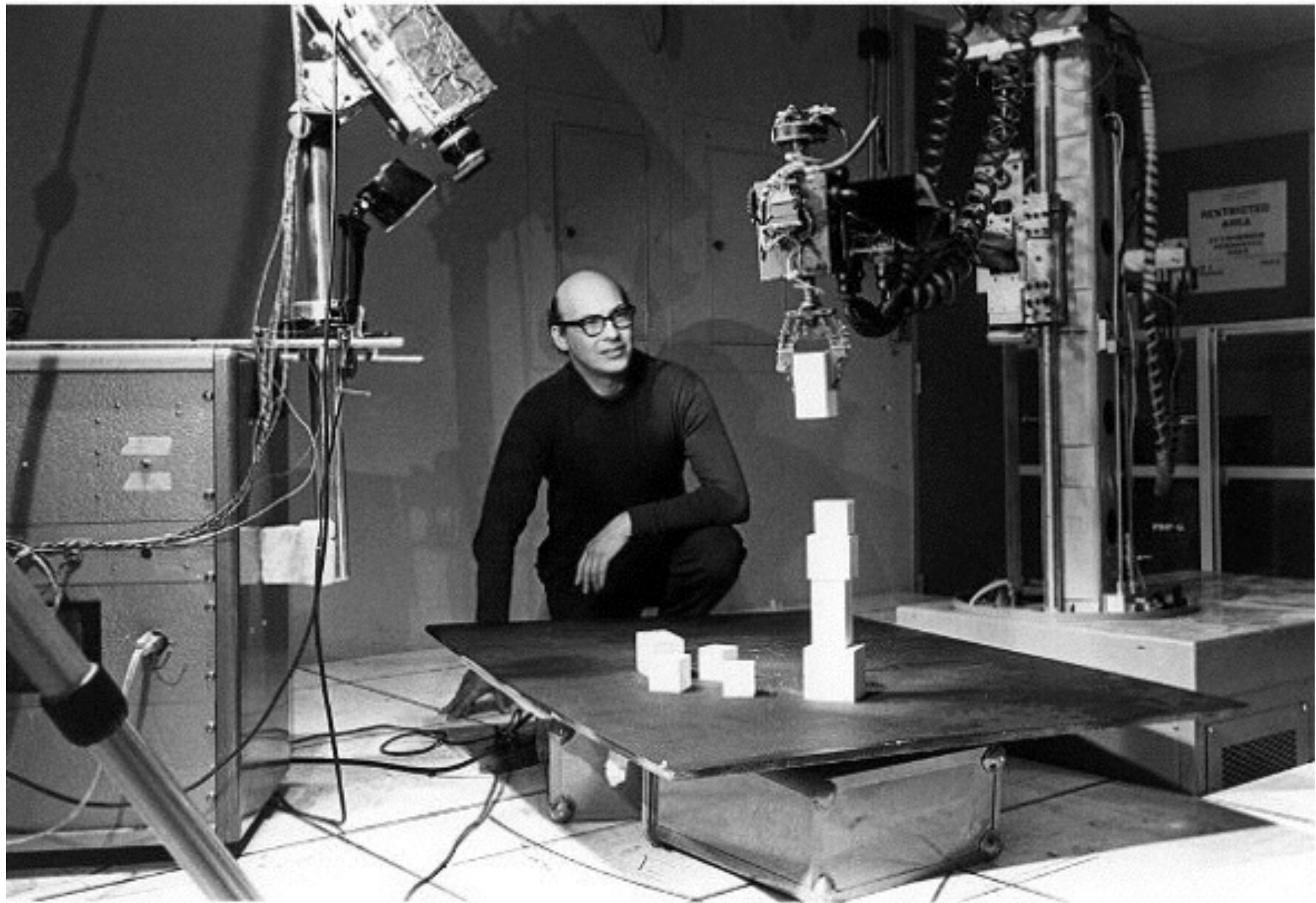
Marvin Minsky

August 9, 1927 – January 24, 2016

homeAI.info -
The home of AI information

- **Directory** list of information resources, 35 categories including software tools, data sets, companies and jobs.

- **Aggregated news** to keep you updated with the latest from around the world, all in one place.

- **New content** created by contributors.

@homeAIinfo   talk@homeAI.info   http://homeAI.info

Awards.AI -
The Annual Achievement Awards for AI

The winners of the 2015 awards have already been announced and listed on our website.

The 2016 Awards will open for voting in September. With 20 different award categories and it is completely free to register your vote.

Follow us on Twitter to learn more.

@Awards_AI   vote@Awards.AI   http://Awards.AI

Events.AI
The Global List of AI Events

Divided by the type of event and then organised by region to make it easier to find events that are near to you.

We have **discount codes** listed on our website to be used when booking tickets to events run by our partners.
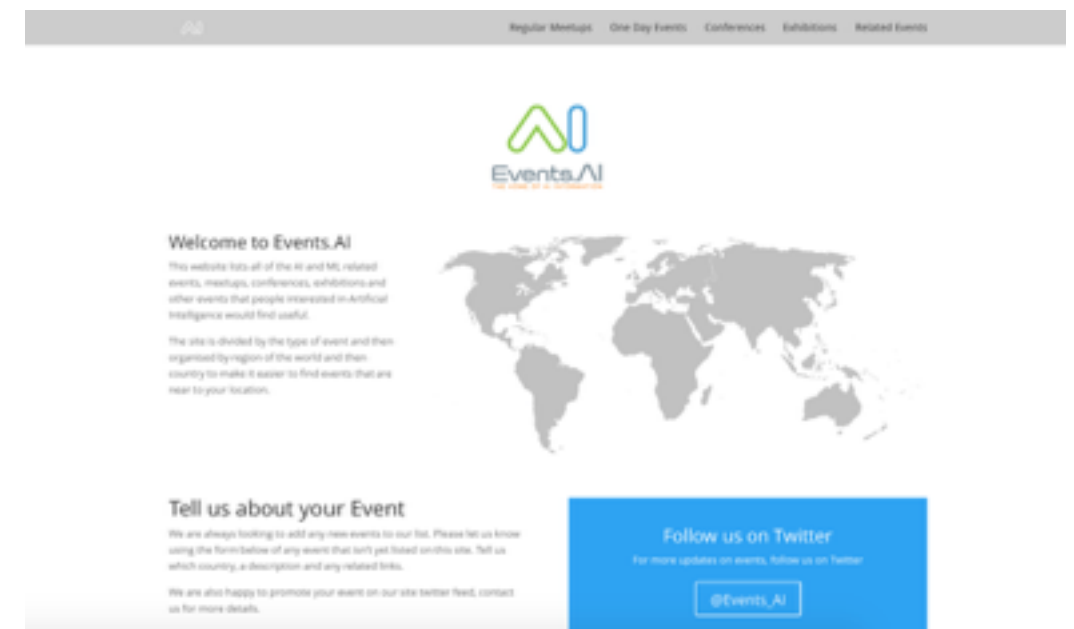
@Events_AI

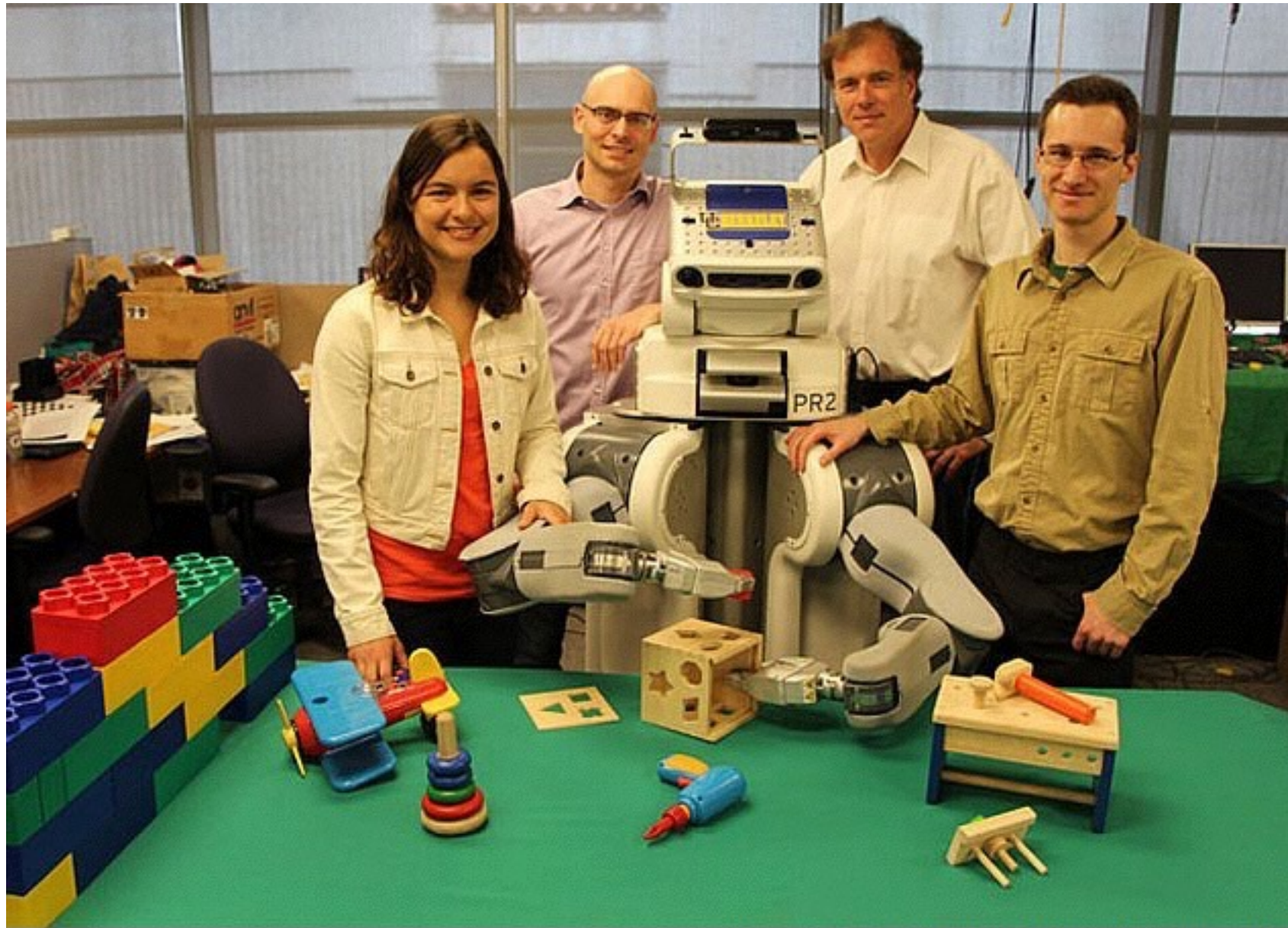http://Events.AI

AI Predictions
for 2016

Image: UC Berkeley Robot Learning Lab

Applications of AI

New 'Deep Learning' Robot Learns Skills Through Trial and Error

Art & Media Creation
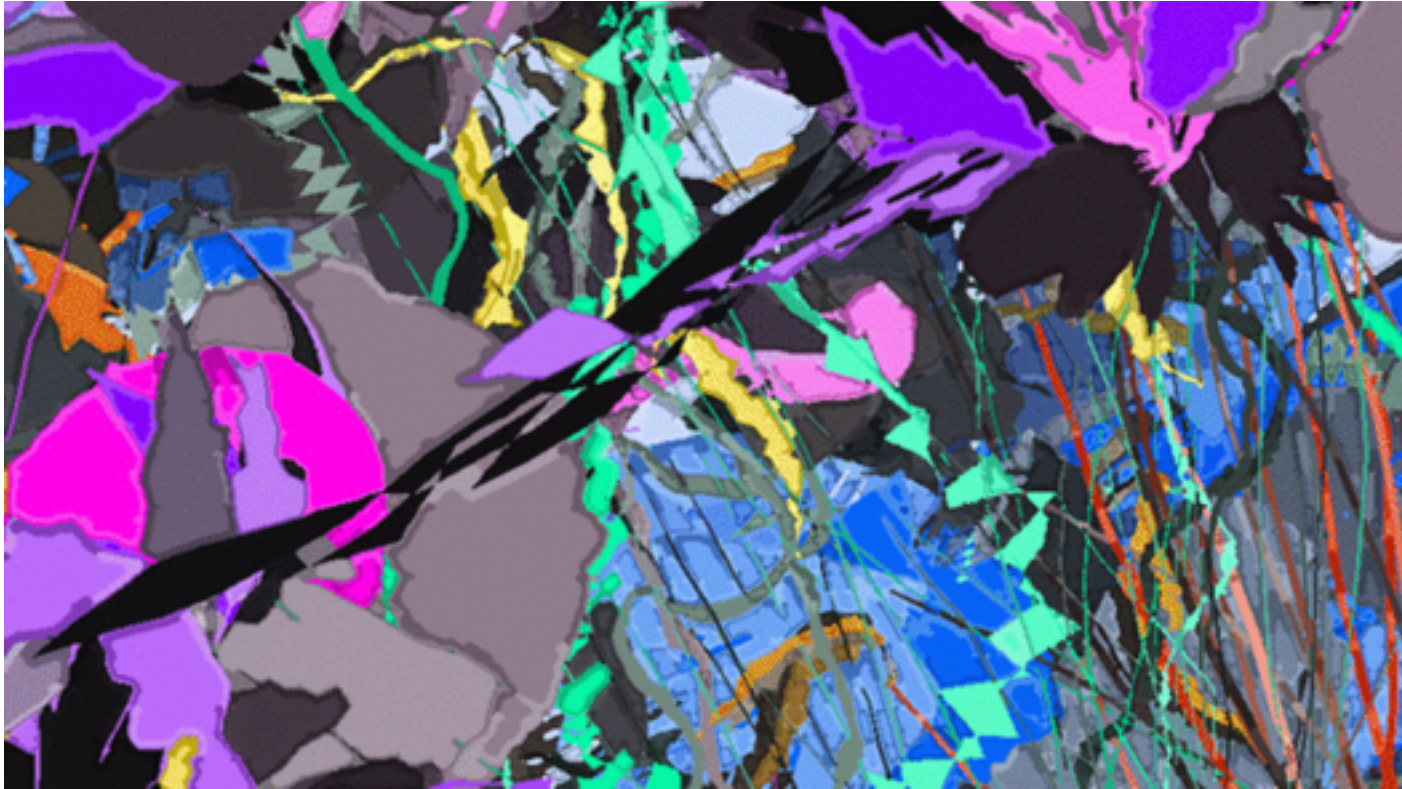
- Man teaches computer program to write new episodes of Friends

- Potential for Legal Issues with the new Content Ownership

Autonomous Robots & Drones

Weaponised Autonomous Robots & Drones

Improved Search

- Context based Search:

  - RankBrain - Machine Learning used to help process search results

  - Implementing Chat bots to better understand the context of your search

Virtual Assistants / Agents

Completely Answered

Bar chart showing "Completely Answered" percentages:
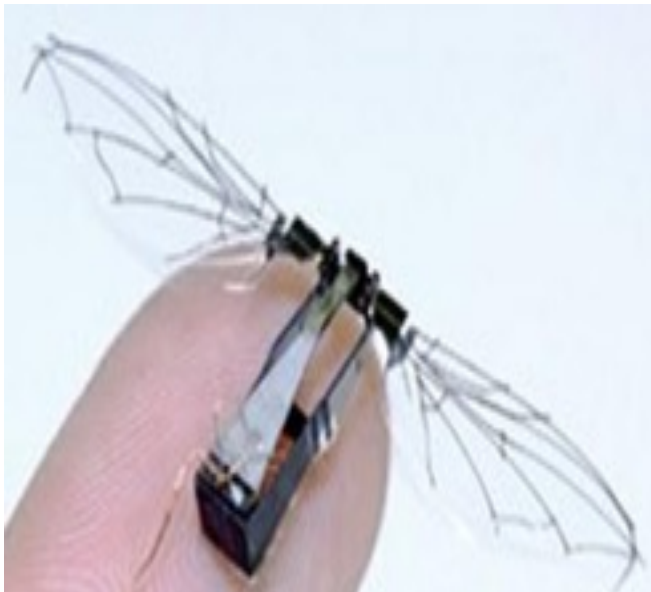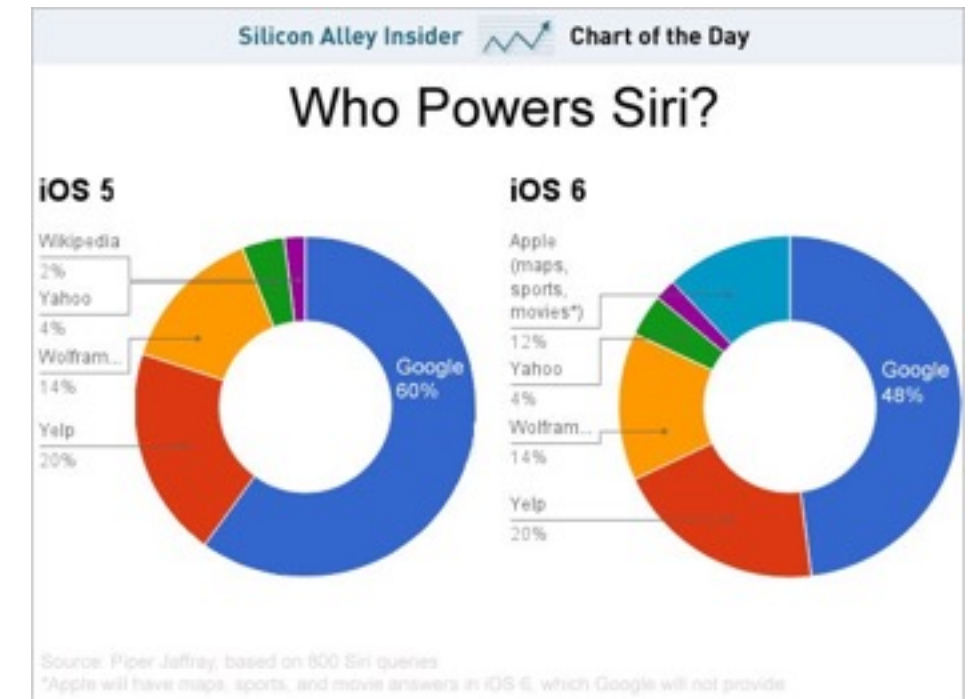- Google Now: 88% (1580/1795)
- Siri: 53% (481/908)
- Cortana: 40% (253/630)

Silicon Alley Insider — Chart of the Day

Who Powers Siri?

iOS 5:
- Wikipedia 2%
- Yahoo 4%
- Wolfram... 14%
- Yelp 20%
- Google 60%

iOS 6:
- Apple (maps, sports, movies*) 12%
- Yahoo 4%
- Wolfram... 14%
- Yelp 20%
- Google 48%

Source: Piper Jaffray, based on 800 Siri queries
*Apple will have maps, sports, and movie answers in iOS 6, which Google will not provide

However still focused on immediate assistance rather than longer term planning

Targeted Content & Referral Systems

- Improved Content Delivery for Social Networks

- Better Product Referrals

- Learning Systems / Online Courses

- Consensus Content

Customer Support

- Natural Language Processing

- Case based Reasoning

➤ Personalised Customer Support

➤ Augmented Customer Support

Self-driving Cars

- Ongoing development of this technology but will not become mainstream for several years

- Continued transformation of the taxi business with Uber well placed to partner with a self drive car developers.

- What is Apple doing in this space? Will we find out in 2016?
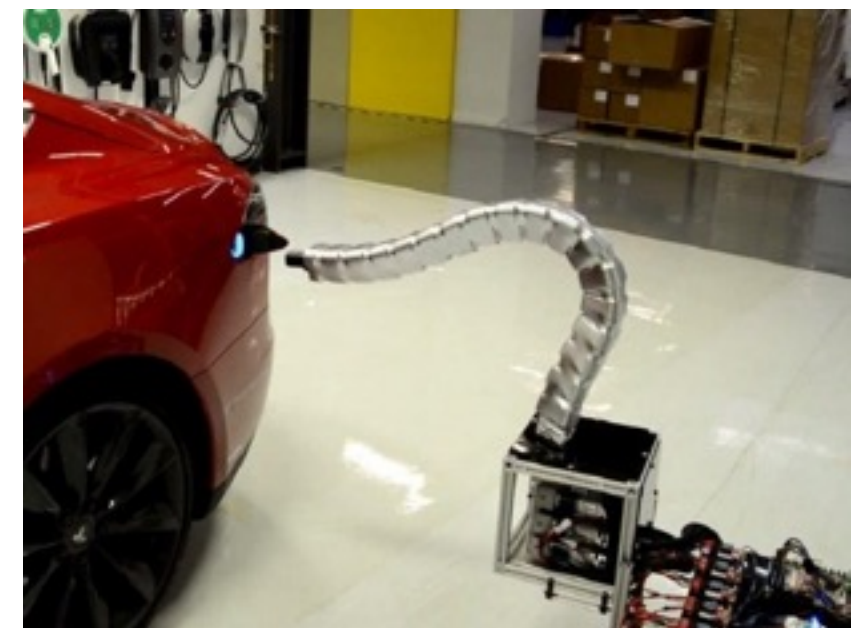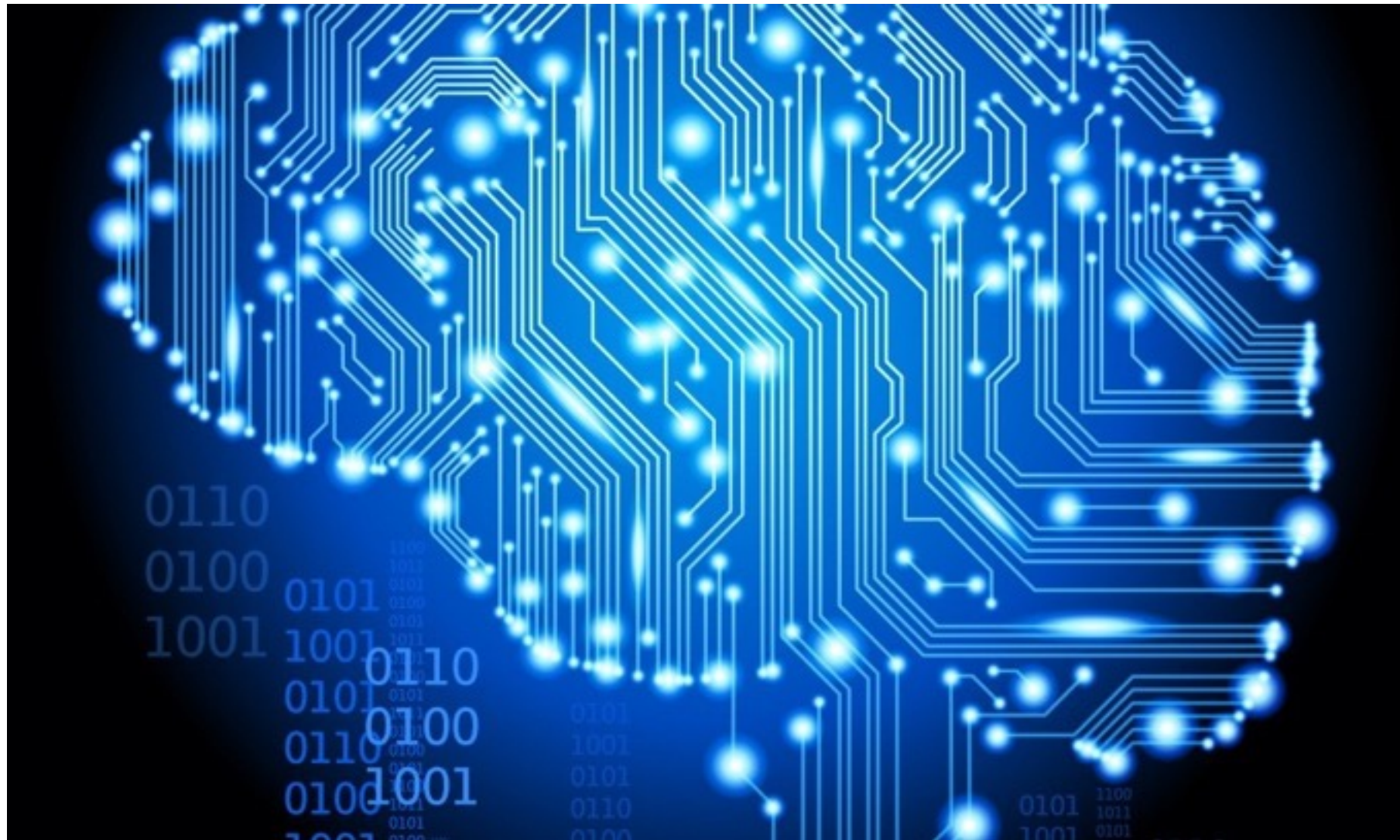
AI Research

Areas of AI Research

- Governance and Ethics

- OpenAI

OpenAI - Looking forward
AI systems today have impressive but narrow capabilities. It seems that we'll keep whittling away at their constraints, and in the extreme case they will reach human performance on virtually every intellectual task. It's hard to fathom how much human-level AI could benefit society, and it's equally hard to imagine how much it could damage society if built or used incorrectly.

Areas of AI Research

- Deep Learning Methodologies and Techniques

  - Open Source Tools and Frameworks

What's next for deep learning?
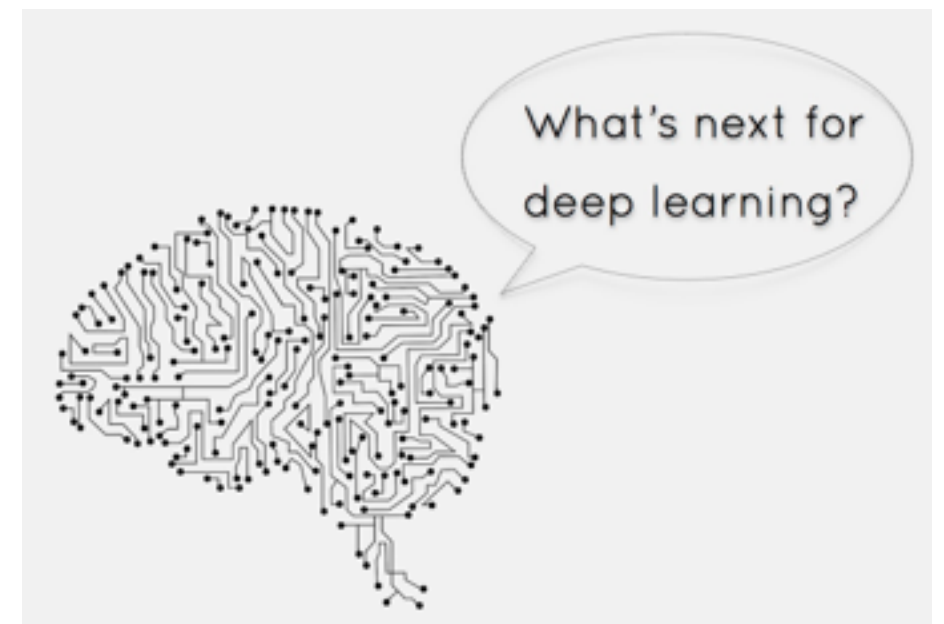
AI in Business

"AI Program Appointed to Board of Directors
of a Venture Capital Company"

Innovation labs

- Innovation labs will become a competitive asset for businesses

- Organisations including retail, insurance, finance and government will be forming innovation labs.

- Innovation labs have existed for some time, but in 2016, we'll start to see more resources devoted to innovation labs

Business Intelligence: Executives will demand transparency

- Just producing a result isn't enough. Executives will realise that smart machines throwing out answers without explanation are of little use.

  - Need systems that can explain how they are arriving at their answers.

- The role of Chief Data Officer will gain momentum

The Power of the Algorithm

- Algorithms will become increasingly refined, standardised and commoditised.

Algorithm Marketplaces continue to expand, examples include:

Algorithmia and Kaggle

and finally …

The AI Alarmists

be Informed about
Artificial Intelligence
a network of information websites
informed.ai

Dr Andy Pardoe

Founder of the Informed.AI Network

http://Informed.AI   andy@Informed.AI   @DrAndyPardoe