Al – friend or foe for insurance businesses?

Humans and AI - A Centaur Approach

Vishaal Hariprasad

CTO, Arceo.ai

20 March 2019



1

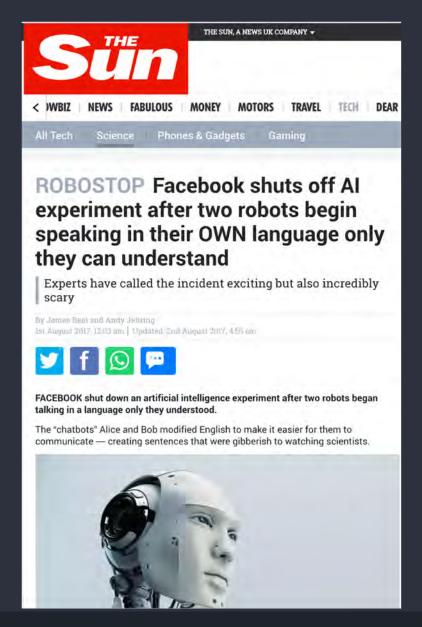
Al Magic?



DIGITAL JOURNAL







Al Primer

ARTIFICIAL INTELLIGENCE

A program that can sense, reason, act, and adapt

MACHINE LEARNING

Algorithms whose performance improve as they are exposed to more data over time

DEEP LEARNING

Subset of machine learning in which multilayered neural networks learn from vast amounts of data



Chess Grandmaster - Garry Kasparov

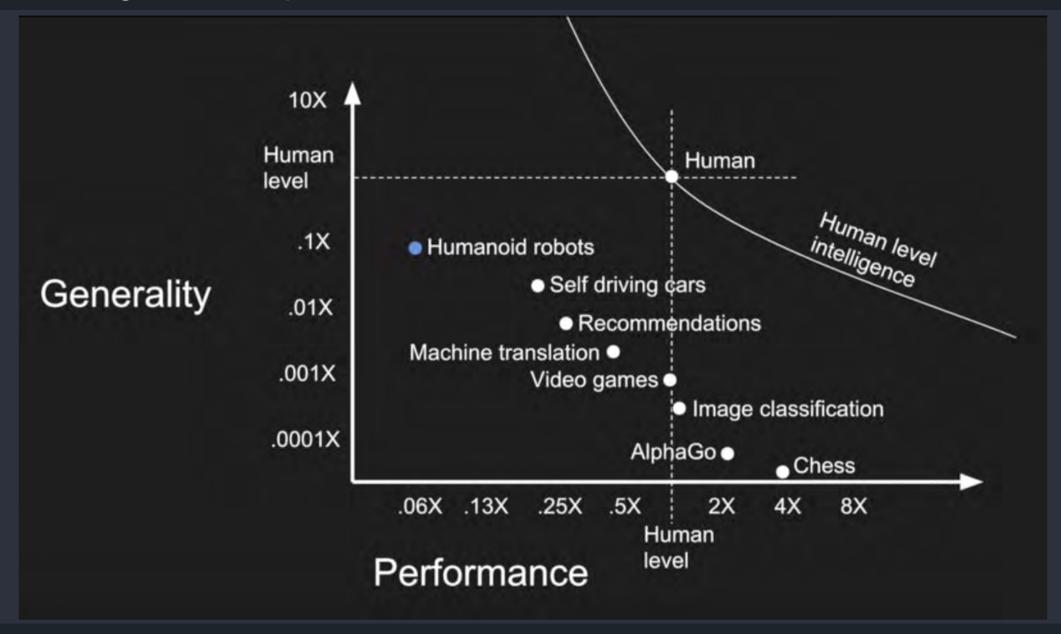


Human vs Machine - 90's

February 1996: Kasparov 4 - 2 Deep Blue May 1997: Kasparov 2.5 - 3.5 Deep Blue



Human Intelligence Perspective





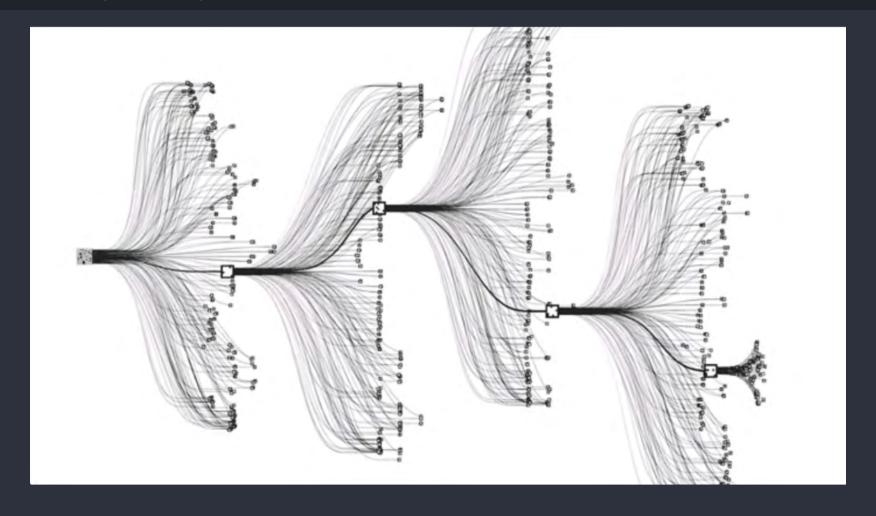
Human vs Machine - 2016



March 2016: Lee Sedol 1 - 4 AlphaGo



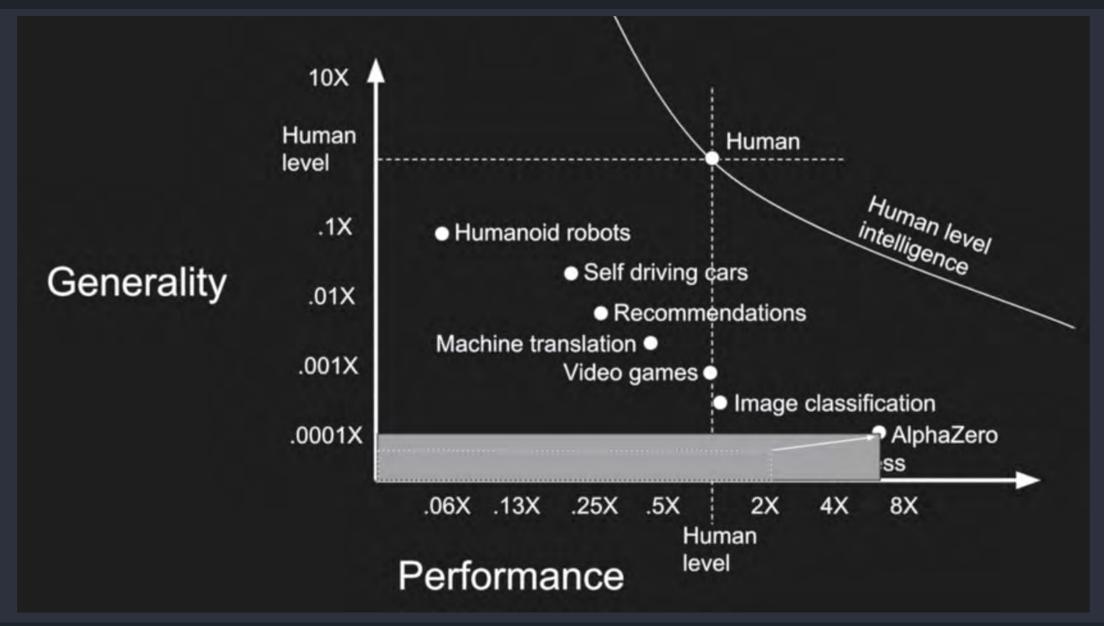
Learning to Learn (MCTS)



October 2017: AlphaGo 0 - 100 AlphaGo Zero



Alpha Zero

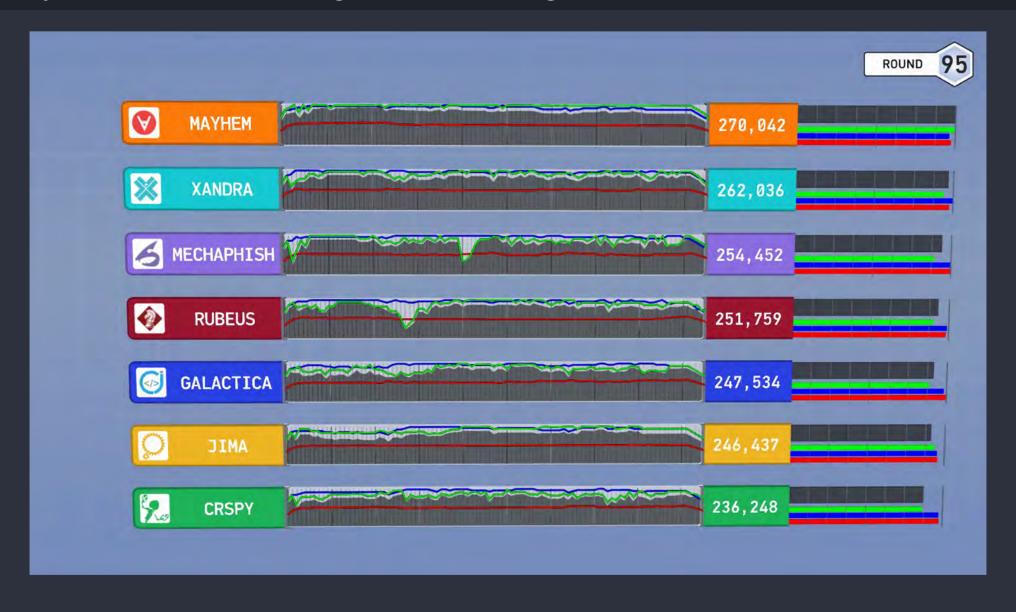




DARPA Cyber Grand Challenge



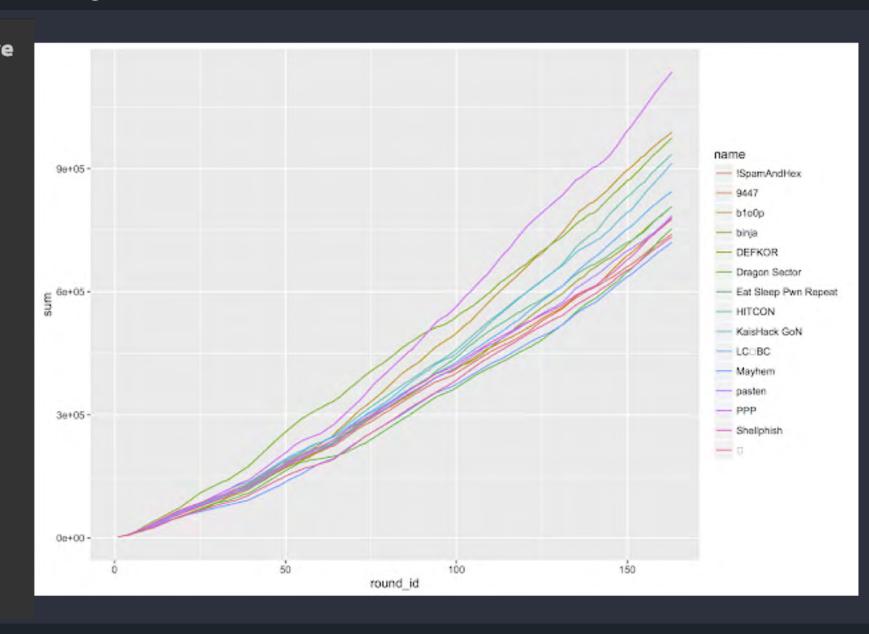
DARPA Cyber Grand Challenge Live Scoring





2016 DEF CON Capture the Flag Results

Team	Final Sco
PPP	113555
b 1 o0p	98891
DEFKOR	97468
HITCON	93539
KaisHack GoN	91331
LC\$BC	84412
Eat Sleep Pwn Repeat	80859
binja	80812
pasten	78518
Shellphish	78044
9447	77722
Dragon Sector	75320
!SpamAndHex	73993
侍	73368
Mayhem	72047



Al – friend or foe for insurance businesses?

ARTIFICIAL INTELLIGENCE

A program that can sense, reason, act, and adapt

MACHINE LEARNING

Algorithms whose performance improve as they are exposed to more data over time

DEEP LEARNING

Subset of machine learning in which multilayered neural networks learn from vast amounts of data

Centaur Theory - Human/Machine Teaming



"...a bigger deal was in 2005. Two amateur chess players using three PCs, won a chess tournament, against a field of supercomputers and grandmasters."

--Bob Work, Deputy U.S. Secretary of Defense



Kasparov's Observation

"weak human + machine + better process

was *superior* to

strong human + machine + inferior process"



Al – friend or foe for insurance businesses?

Vishaal Hariprasad -- v8@arceo.ai

CTO, Arceo.ai

20 March 2019

