Partnering with Machines
“Harness Network Intelligence”

“Small pieces loosely joined”

“Rough consensus and running code”

http://www.media.mit.edu/events/2012/04/04/media-lab-conversations-series-reid-hoffman
“The key to the 21st century is to achieve the right balance between humans and machines to optimize outcomes” – Boyd

Human/Machine Intelligence Partnership
Large Datasets > Algorithms

How I got Religion on Machine Learning

2009 Natal, Alex Kipman and Jaron Lanier (Boyd)
Deepmind learns Atari
The game of Go has over

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possible positions.
Think Fast
Hangar 51: The Problem

- Warehoused content is not **curated knowledge**.

- Like Hangar 51 in Raiders Of The Lost Ark, most data and experts in large organizations are undiscoverable or underutilized.

The Unusable Warehouse of people and data

Now where was that write-up where we already figured this out...?
Example: TanjoCase - A Machine Learning Map Of Every Case Law Opinion In The United States Since 1797.
The Scientific Method Just Got an Upgrade

Scientific Method

Invent a Hypothesis, Design an Experiment, Test It, Repeat

Unsupervised Machine Learning

Find Every Valid Hypothesis, Then Pick The Useful Ones
Problem: Use machine learning to apply the upcoming new revenue recognition rules from FASBI (which went into effect 12/2017) to large sets of contracts to determine which rules apply. RevRecBot reads your sales contracts, understands the language within them, and suggests (with a confidence score) the correct method for revenue recognition or whether the contract may have a problem that needs human attention.

Customer: CPAs
Taxonomy Of Clauses
Artificial Intelligence

1958-2009 Phase 1  Programmers telling machines what to do
2009-2018 Phase 2  Data scientists in high demand
2018-? Phase 3  Behavior Scientists
TAP – The Tanjo Animated Personas platform allows marketers to have a new deep level of interaction with customer segments for their products and services. Using machine learning, TAP creates dynamic simulated customer models from archetypal customer segmentation research and brings that data to life in the form of synthetic customer personas. Marketers can now, finally, watch as these synthetic customer models view and digest online content. Present a TAP model with a product message and see it respond to (and score) that messaging from the viewpoint of that customer segment. TAP brings deep customer conversations to life.
The other problem with surveys and focus groups
Large-scale agent-based simulations
Demographics

Social & Education: Mother of 2, undergrad, retail sales mgr

Economic: Household income £45,000 - £55,000

Gender & age: Female, 37 years old

Interest Graph

Product purchase data: spending habits, seasonal, life events & stage
Location data from apps: GPS daily activity, stores shopped, browser
Current topics of interest

Personality and Sentiment

Detailed preferences: media, language, color, style, ...
Sentiment: political views, emotional IQ, holiday & event moods
Personality profile: Myers & Briggs derived from social

Behavior Choice Model

Gathered intelligence
Choice experiment data
Prior choices

Unknowable Persona Details

Filling in Persona Levels of Detail

How complete is your model?

How complete is your model?

Better

Levels of Detail

20%

40%

60%

80%
Victor Hugo felt that the Romantic, or "the complete poet" as he calls it, "consists of three visions: Humanity, Nature, and the Supernatural" (Shroder, 68). The first voice Hugo heeded was that of humanity, calling the poet to accomplish his role as a humanitarian by taking part in political activity. Where he had earlier rallied to the aristocracy, he now associated himself with the people. In the 1850's, the bourgeois origin Victor Hugo, declared himself the plebian hero. The things of which he wrote were about the people and for the people. He believed in the common man, and saw the poor as the legs by which the rich were able to stand. He saw in them potential and he worked hard to have this potential realized by the people. His most memorable characters in *Les Miserables* were not of the rich or people of high-standing, but rather, of the poor and common man.

To the very end, Hugo felt an empathy for the poor, and though he didn't share in their poverty, he did sympathize with their plight. He carried his association with the lower classes even to his final breath: in accordance with his will, his coffin was carried on the *corbillard des pauvres*, the bare carriages used in the funerals of the poor.
I have received no particular Accounts respecting the Maryland Eastern Shore Militia. From the best information I have, a Great many are well disposed to turn out, but are prevented giving their aid, thro’ the want of Arms. Apprehending that the Militia there would stand in need of an Officer to arrange them, I wrote to Genl. Cadwalader, expressing his good offices, which, I am told have, been exerted. Colo Gist is now gone down and I expect will move from as soon as possible, with such as are armed, towards the Enemy. Genl Smallwood is gone to take the Command of troops on the Western Shore, of which, I hear, many are coming, but I have no authentic advices on the Subject. I have no Honor etc.

P S Will it not be advisable to order Colo. Richardson’s Regiment, from their present Station to march and Join the Eastern Shore Militia?"
I have a dream (Mhm) that one day (Yes) this nation will rise up and live out the true meaning of its creed: “We hold these truths to be self-evident, that all men are created equal.”

[applause]

I have a dream that one day on the red hills of Georgia (Yes, Talk), the sons of former slaves and the sons of former slave owners will be able to sit down together at the table of brotherhood.

I have a dream (Yes) [applause] that one day even the state of Mississippi, a state sweltering with the heat of injustice (Yeah), sweltering with the heat of oppression (Mhm), will be transformed into an oasis of freedom and justice.

I have a dream (Yeah) [applause] that my four little children (Well) will one day live in a nation where they will not be judged by the color of their skin but by the content of their character. (My Lord) I have a dream today. [enthusiastic applause]

I have a dream that one day down in Alabama, with its vicious racists (Yes, Yeah), with its governor having his lips dripping with the words of “interposition” and “nullification” (Yes), one day right there in Alabama little black boys and black girls will be able to join hands with little white boys and white girls as sisters and brothers. I have a dream today. [applause] (God help him, Preach)

I have a dream that one day every valley shall be exalted (Yes), every hill and mountain shall be made low, the rough places will be made plain (Yes), and the crooked places will be made straight (Yes), and the glory of the Lord shall be revealed [cheering], and all flesh shall see it together. (Yes Lord)
Submit ideas and have them react

What do the Personas think about your offering?
In 1997 Douglas Adams tapped us to create the natural language processing system to enable conversation with the game characters in "Starship Titanic". He ended up calling it Spookitalk to describe the feeling on the back of the neck we sometimes got when the game responded in a surprising way.
The Cambridge Analytica saga is a scandal of Facebook’s own making

*John Harris*

This mess was inevitable. Facebook has worked tirelessly to gather as much data on users as it could - and to profit from it.
“After weeks of investigation later, the mystery of the American Kale Association still plagued me.”

Got Kale?

FIFTY SHADES OF KALE

50 Fresh & Satisfying Recipes That Are Bound to Please

Drew Ramsey, M.D., & Jennifer Laenich

Micro message

Micro message

Micro message

Micro message

Micro message
Winning Hearts and Minds with Machine Learning

Guide target through belief system journey

Additional messages move them closer to being captured by the gravitational pull of the desired ideas

“...is not telling lies, but rather selecting the truth you require and giving it, mixed up with some truths the audience wants to hear.”
(Daugherty 1958a: 39)
GO DEEP ON MACHINE LEARNING

Let's talk 10X

WHERE?
THE COUNTING HOUSE
@21c MUSEUM HOTEL

WHEN?
MAY 4
~3:00PM to 5:00PM

WHY?
BECAUSE WE HAVE MACHINE LEARNING, DRINKS, DESSERTS, AND A 10X IDEA FOR YOU!

RSVP »

TANJO
A Boutique Machine Learning Solutions Firm
WWW.TANJO.NET
Suggested Reading

Before it’s too late

Twitter: @Metaversial