Partnering with Machines

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Perspective



"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



How I got Religion on Machine Learning

Large Datasets > Algorithms





2009 Natal, Alex Kipman and Jaron Lanier (Boyd)



Deepmind learns Atari





Time At last – a computer program that can beat a champion Go player Mat 484 ALL SYSTEMS GO SONGBIRD SAFEGUARD TRANSPARENCY WHEN GENES GOT 'SELFISH

Coogle DeepMind

The game of Go has over

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.





Unsupervised Machine Learning Discover hidden structure & classification in unlabeled data.

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Discover the best correlations:

A:B C:D E:F G:H I:J K:L M:N O:P Q:R S:T U:V W:X Y:Z Pick useful ones: E:F M:N S:T W:X



RevRecBot



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 Tanjo Animated Personas



Marketers Output:

•<u>Product Design</u>: what do we build that our customers will like? •<u>Promotion Message</u>: what do we say to get our customers to react positively? •<u>Placement</u>: where do we market to reach our customers?

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







Victor Hugo Resurrected



Jaurage



Persona TAP Victor Hugo read "Milton Friedman" ouTube on Tue Jun 27 201

philip

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an par formache, fair on flours on on fruits, a to cope pas les heams. gaant From servini - je ? Comoto

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Persona TAP Victor Hugo read "Notre Dame football" NCAA.com on Fri Aug 11 2017 14.1

Interest Level: 99%

...

Persona TAP Victor Hugo read "New computing system takes its cues from human brain" Eurekälert! Science News on Sun Jun 18 201

Write or Book1

Sort by Match

Sort by Time

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.

George Washington – Animated Persona

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Animated Personas that Read







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, whare prevented giving their aid, thro' the want of Arms Apprehending that the Militia there would stand in need on Officer to arrange them, I wrote to Genl. Cadwalader, Questing his good offices, which, I am told have, been expected. Colo Gist is now gone down and I expect will move as soon as possible, with such as are armed, towards the premy. Genl Smallwood is gone to take the Command of Qore on the Western Shore, of which, I hear, many are colling, but I have no authentic advices on the Subject. I have the Honor etc. P S Will it were advisable to order Colo. Richardson's Regi-

P S Will it is advisable to order Colo. Richardson's Regiment, from their present Station to march and Join the Eastern Shore Militia?³⁷

TAP Dr. Martin Luther King, Jr.

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?



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→ C	🔘 https://tanjo.al/personas 🔍 🛈 🗮 🖬 🔜 🌱 🛧 😰 🖗 🖾 🐼 🗄
	Tanjo Animated Persona Ad Campaigns Ad Campaigns Personas Menu
amp	aigns 🕀
► E	acebook campaign.
✔ М	agazine print campaign. 🖉
Ads 🕀	
>	GQ Mag Spring ad copy test results by persona:
Ann	erage interest in ad
	di - Marteng cebity en - Design trendicetter
\sim	Time Mag Spring ad copy test results by persona:
less	
Ad	The Mega Benefits of a Smithsonian Membership Want a fun and easy way to foster an interest in science in your kids? Make going to
	the Smithsonian a regular family activity. Find out how a membership pays off. [Woman scientist demonstrates science to students]
	Edit
Per	rsonas 🕀
	Average interest in ad
85	68% overall interest in ad 72% interest in ad via top topic Buyer Personas
20	Doug - At home writer Suggest Remove
Ψ	42% overall interest in ad 81% interest in ad via top topic Coffeehouse enlightenment
9	David - Marketing celebrity Suggest Remove
M	72% interest in ad via top topic Buyer Personas
1	Ellen - Design trendsetter Suggest Remove
	90% interest in ad via top topic Art Exhibits
6	Steve - Gamer Tech Guy Confirm Rem Cancel
	22% interest in ad via top topic Video Cards Leslie - Grad at first job Suggest Remove
NE	75% overall interest in ad 8% interest in ad vas top topic <u>Small Apartment Living</u>
more	Vogue Mag Spring ad copy test results by persona:
Elle Ste	erage interest in ad en - Design trendsetter ex - Gamer Fech Guy
	- Grad at First Job
	Better Homes and Gardens Magazine Spring Ad for Susan's
	New Designs ad copy test results by persona:
EII-	erage interest in ad
	/ primetime spots campaign.
/ /	v princerine apola campaign.

1997 Starship Titanic NLP



Assaught Memory failure! Memory failure! What happened to Titenia? Someone's nicked all the intelligent bits from





In 1997 Douglas Adams tapped us to create the natural language processing system to enable conversation with the game characters in

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nic". He ended up calling it describe the feeling on the back of ometimes got when the game sponded in a surprising way

Lt. Col James C. Boyd Animated Persona of my Dad. By Richard Boyd



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



▲ Facebook CEO Mark Zuckerberg speaks at the F8 summit in San Francisco, California. Photograph: Josh

"After weeks of investigation later, the mystery of the American Kale Association still plagued me."









Winning Hearts and Minds with Machine Learning

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GO DEEP ON MACHINE LEARNING



Suggested Reading

Before it's too late





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