

~~AOM 2022: GPT-3 as your Qualitative Research Assistant~~

AOM 2023: ChatGPT as your Qualitative Research Assistant

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GPT @ AOM

2 sessions @ AOM 2022

16 sessions @ AOM 2023

AOM 2024?
CANCELLED?

Session Added ★ **Mon, Aug 07, 10:00 AM**

1020: We Need to Chat: Discussing the Ramifications of ChatGPT for Methodological Research

Description

CTO Featured +3

> Symposium (panel) 303, Hynes

Session Added ★ **Mon, Aug 07, 12:00 PM**

1196: Academic Research is Dead. The Robots Won

Description

Practice Research +4

> Symposium (panel) Regis, Marriott

Session Added ★ **Sun, Aug 06, 11:00 AM**

616: Ethics Forum: AI, Ethics, and Academia

Description

AAA

> Meeting Empire, Westin

Session Added ★ **Sat, Aug 05, 08:00 AM**

259: AI Tools for Academic Research: A Revolutionary Shift or the Beginning of the End?

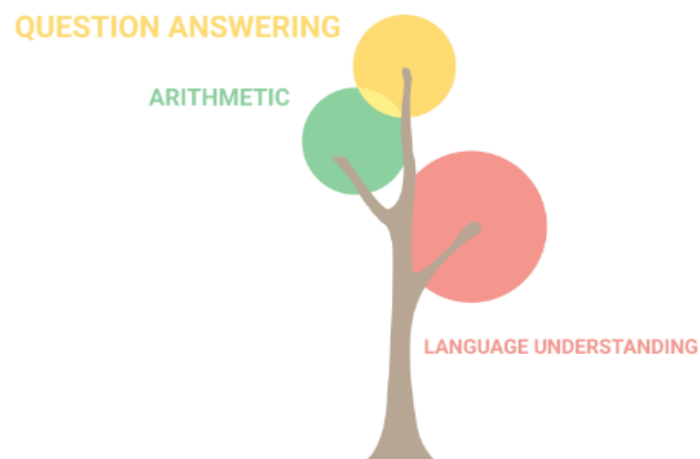
Description

CTO RM +3

> PDW (workshop) Salon F, Marriott



Language Models Taking over the World!



8 billion parameters

<https://ai.googleblog.com/2022/04/pathways-language-model-palm-scaling-to.html>

Google's Pathways Language Model (PaLM)

Explaining a joke

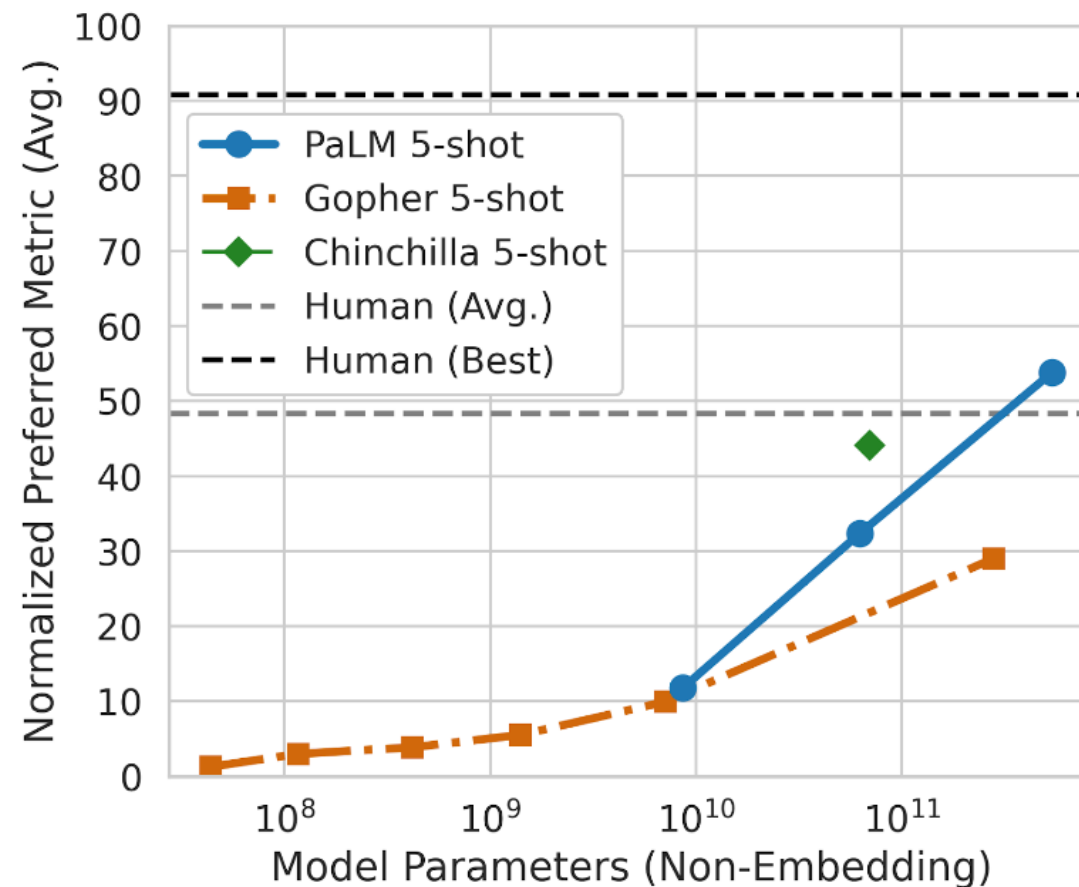
Prompt

Explain this joke:

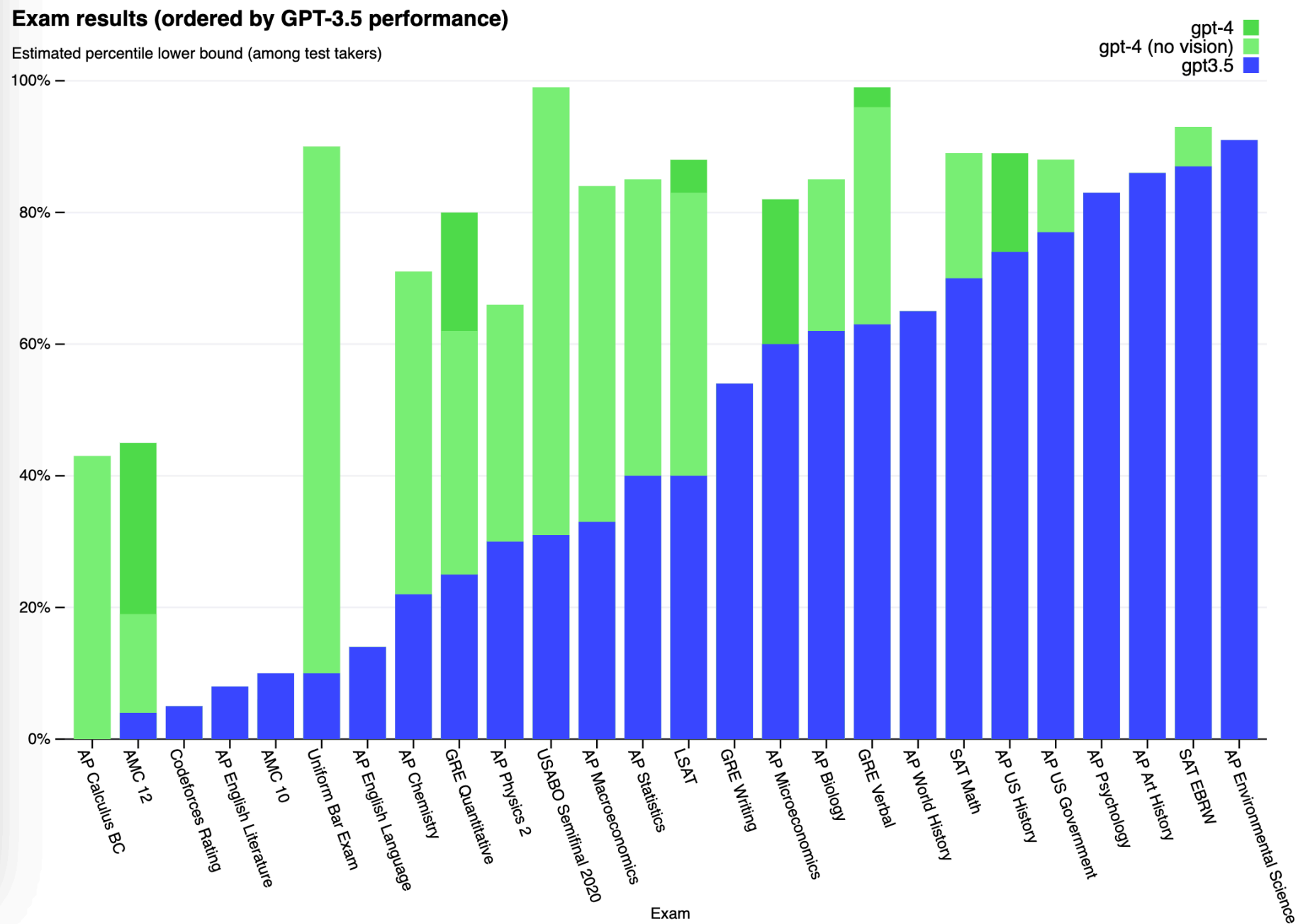
Joke: Did you see that Google just hired an eloquent whale for their TPU team? It showed them how to communicate between two different pods!

Model Response

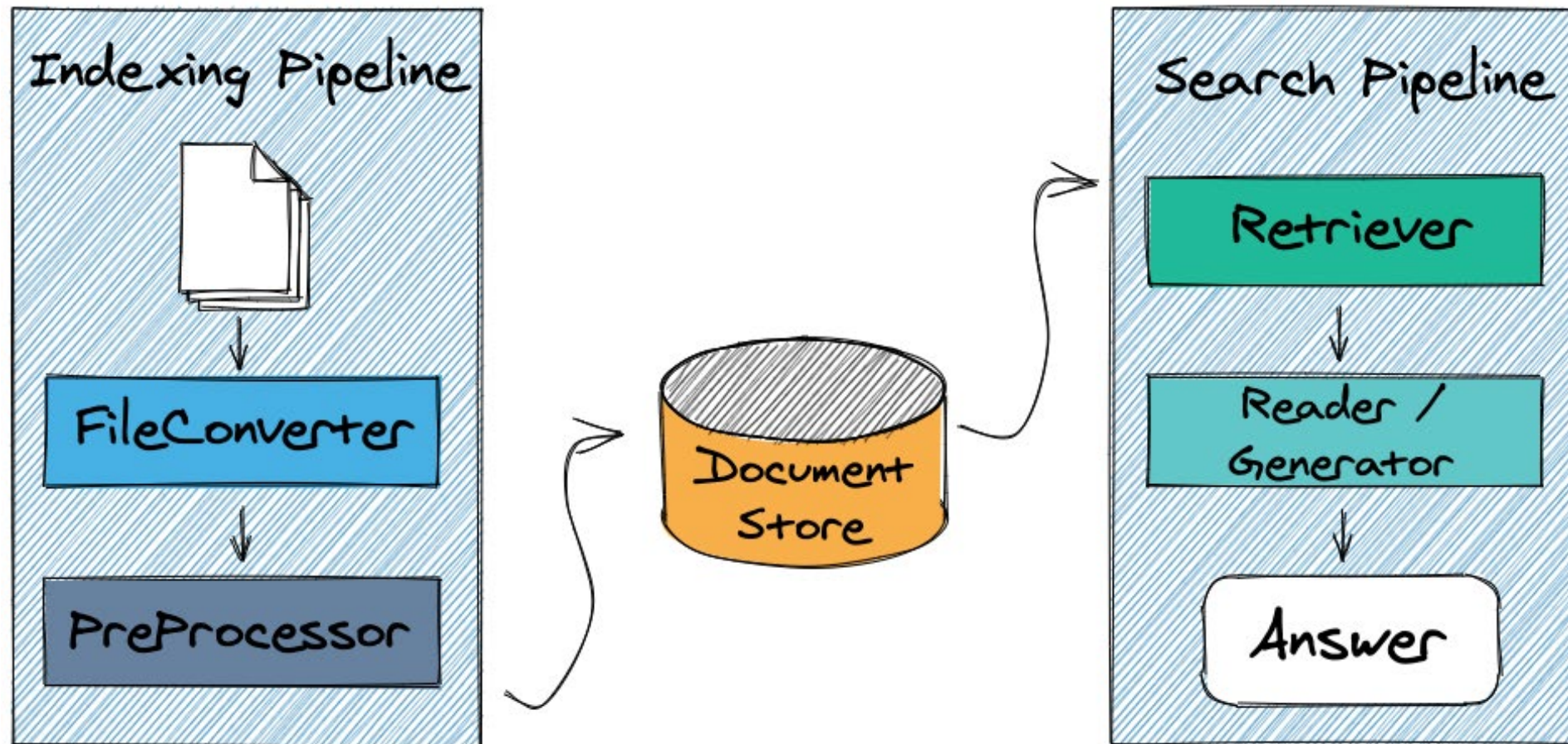
Prediction: TPUs are a type of computer chip that Google uses for deep learning. A "pod" is a group of TPUs. A "pod" is also a group of whales. The joke is that the whale is able to communicate between two groups of whales, but the speaker is pretending that the whale is able to communicate between two groups of TPUs.



ChatGPT performance in standardized tests



Q/A System Anatomy



<https://haystack.deepset.ai/docs/intromd>

Demo

Your question

Who are Amazon aggregators?

Answer

Amazon aggregators are companies that buy and sell Amazon businesses.

	quotes
0	Bradley Sutton: Okay. And then you, you actually do take it very ...
1	Bradley Sutton: Okay. So the companies who are agencies or co...

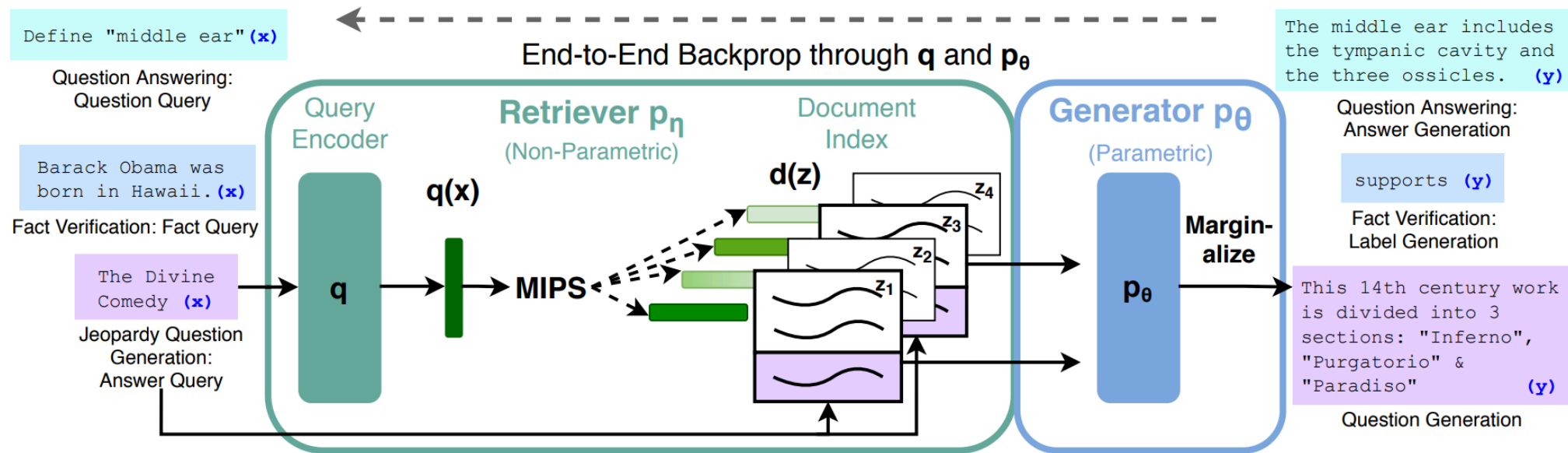
02:38 – An Application to College Returned to Sender04:58 – Launching and Failing in the Amazon Supplements Niche08:16 – A Second Amazon Product Launch was “Amazing”10:00 – Over a Million in Profits Starting in 201712:36 – Building a Single Strong Amazon Brand14:27 – How to Determine a Good Amazon Product16:43 – It Doesn’t Take Kevin King’s Skills to Succeed on Amazon19:33 – Amazon Aggregators Came Knocking 20:59 – How Did Mitul Value His Amazon Business? 23:14 – An Aggregator with Amazon Experience Seals the Deal26:35 – What Did Mitul Do with His Big Payday?26:36 – Investing in Sports Cards 34:29 – Card Values are Skyrocketing39:48 – A Stock Market for Sports Fans41:39 – Mitul is Making His Way Back to Amazon45:37 – How to Contact Mitul

<https://github.com/hanisaf/aom-2022-content-analysis-pdw>

- Used (now deprecated) OpenAI GPT-3 QA API
- A lot of progress on this front



Retrieval Augmented Generation (RAG)

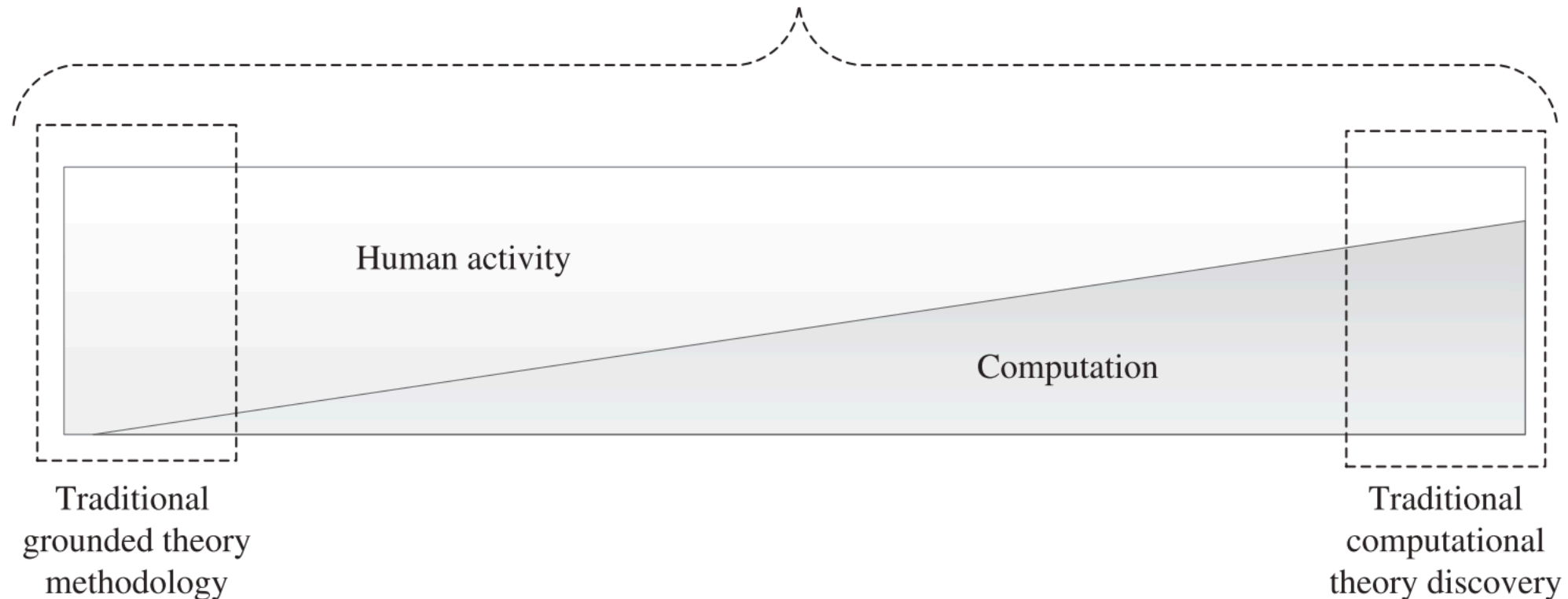


Lewis et al. 2020: Retrieval-Augmented Generation for Knowledge-Intensive NLP Tasks

- <https://docs.aws.amazon.com/sagemaker/latest/dg/jumpstart-foundation-models-customize-rag.html>
- <https://learn.microsoft.com/en-us/azure/machine-learning/concept-retrieval-augmented-generation?view=azureml-api-2>
- <https://ai.meta.com/blog/retrieval-augmented-generation-streamlining-the-creation-of-intelligent-natural-language-processing-models/>

Let Us Talk about Augmentation Possibilities

Data-driven computationally
intensive theory development



Berente, N., Seidel, S., & Safadi, H. (2019). Research Commentary—Data-Driven Computationally Intensive Theory Development. *Information Systems Research*, 30(1), 50–64

QA → Research Activities

- Language models hallucinate
- Language models are trained on non-academic data
- Language models lack specialized knowledge
- Research is a conversation
- Need answers specific to certain sources

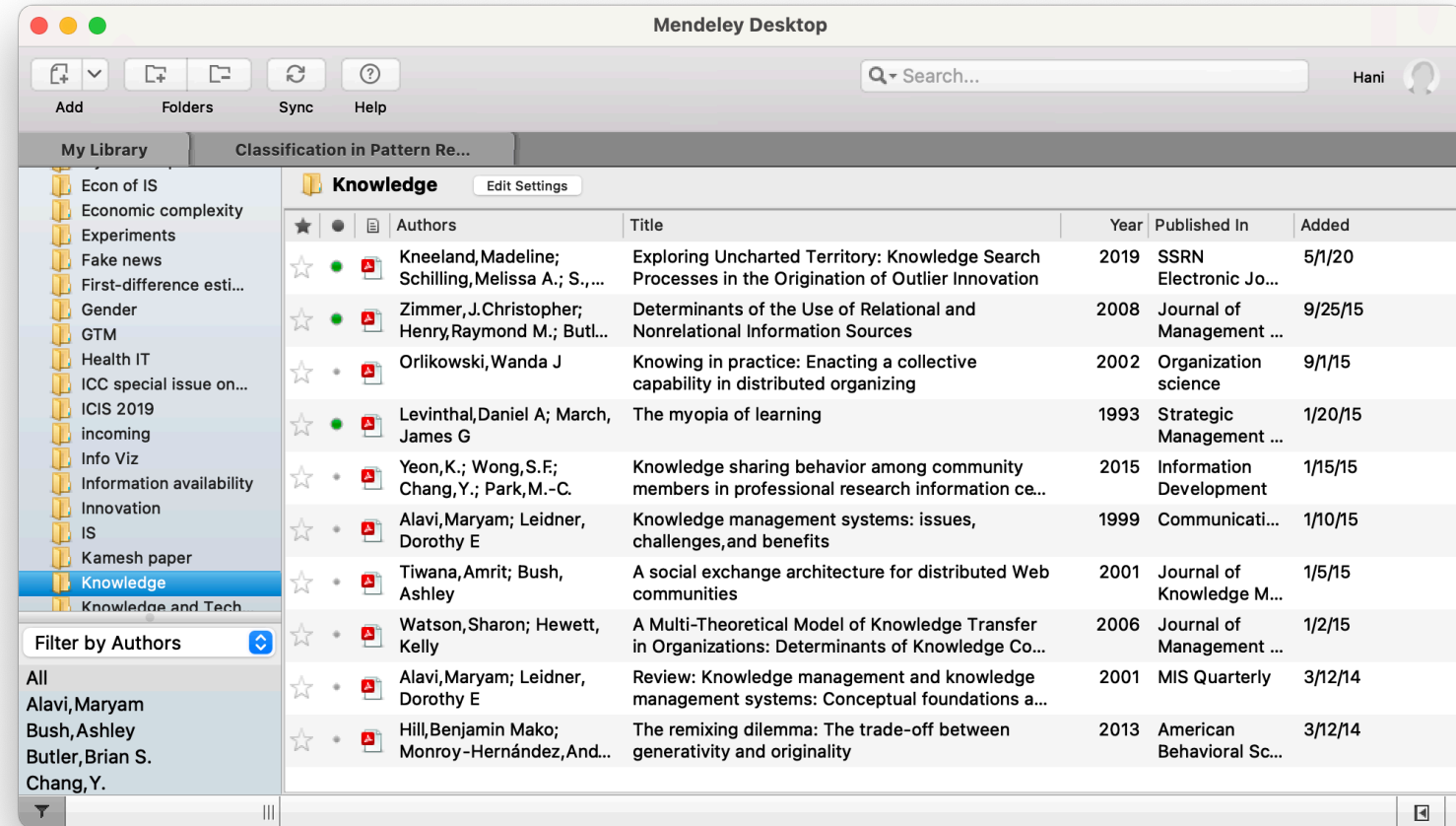


LangChain

Retrieval Augmented Generation (RAG)



<https://github.com/hanisaf/rennat>



Query Papers

Please enter your query (DONE to exit): define IT governance

IT governance refers to the framework and processes that determine decision-making rights and responsibilities related to IT within an organization. It involves identifying who has the authority to make decisions, who provides input, and how individuals or groups are held accountable for their roles.

SELECTED SOURCES:

...

SELECTED PAPERS:

0 - Gregory et al. - 2018 - IT Consumerization and the Transformation of IT Governance.pdf

...



Converse with a Paper

Discriminating IT Governance

Amrit Tiwana

University of Georgia, Athens, Georgia 30602, tiwana@uga.edu

Stephen K. Kim

Iowa State University, Ames, Iowa 50011, stevekim@iastate.edu

Please enter paper keyword, or hit enter to skip: Tiwana Kim Governance

Based on the meta data, the following documents are found:

0 - Tiwana, Kim - 2015 - Discriminating IT Governance.pdf

Please enter your query (DONE to exit): What is IT governance?


all:

IT governance refers to the decision-making process regarding IT applications and IT infrastructure within a firm. It involves determining the allocation of decision rights between the IT unit and line functions.



Summarize a Paper

Foundations of complexity economics

W. Brian Arthur 

Please enter paper keyword, or hit enter to skip: Foundations complexity economics

Based on the meta data, the following documents are found:

0 - Arthur - 2021 - Foundations of complexity economics.pdf

enter a query (e.g., summarize) (DONE to exit): summarize in a bullet list

The selected paper has 10 pages, from 1 to 10

You can select a subset or press enter to continue with all: 1-6

- Economic theory has traditionally viewed agents in the economy as rational decision makers.
- Complexity economics challenges the notion of equilibrium and super-rational decision makers.
- Complexity economics sees the economy as an ever-changing ecology of beliefs, organizing principles, and behaviors.
- Complexity economics emerged from a pathway of thinking about how the economy actually works, rather than an attempt to discard standard assumptions.
- Complexity economics relaxes the assumptions of perfect rationality and introduces concepts such as representative agents, common knowledge, and equilibrium.
- Complexity economics studies how elements interacting in a system create overall patterns and how these patterns, in turn, cause the elements to change or adapt in response.
- ...

Comparative Analysis

what are IT affordances?

The following sources are found:

0 - Wynn, Jr., Williams - 2020 - ...

1 - Stendal, Thapa, Lanamaki - 2016 - ...

2 - Robey, Anderson, Raymond - 2013 - ...

3 - Strong et al. - 2014 - ...

4 - Leonardi - 2011 - ...

Select the sources you want to use, enter to select all: 1,2,3,4

IT affordances refer to the action possibilities or capabilities that information technology (IT) systems offer to users. These affordances can be identified through the study of how users interact with IT systems and the potential benefits they provide. There is a lack of consensus on whether affordances are intended or emergent, as well as whether they are functional or non-functional.

---- Stendal, Thapa, Lanamaki - 2016 - Analyzing the concept of affordances in information systems

IT affordances refer to the possibilities and limits for action that information technology offers to individuals and organizations. The concept of affordance originated in ecological psychology and is used to define the action possibilities that a material object, such as IT hardware and software, provides to an actor. There are debates among scholars regarding the ontological nature of affordances, with some arguing that affordances are properties of the environment and others arguing that they are relationships between an animal (or actor) and its environment.

---- Robey, Anderson, Raymond - 2013 - Information Technology , Materiality , and Organizational ...



Literature Synthesis

what do we know about the effect of enterprise social media on knowledge sharing?

SELECTED PAPERS:

0 - Leonardi - 2015 - Ambient Awareness And Knowledge Acquisition Using Social Media To Learn “Who Knows What” And “Who Knows Whom”.pdf

1 - Utz, Levordashka - 2017 - Knowledge Networks in Social Media BT - The Psychology of Digital Learning Constructing, Exchanging, and Acqui.pdf

2 - Technology - 2015 - Social Media and Their Affordances for Organizing A Review and Agenda for Research A REVIEW AND AGENDA FOR RESEARCH.pdf

3 - Leonardi - 2017 - The social media revolution Sharing and learning in the age of leaky knowledge.pdf

FINAL ANSWER

Enterprise social media has been theorized to enhance organizational knowledge sharing. Studies have shown that it has a positive effect on knowledge sharing by providing new opportunities. Social media for knowledge sharing in organizations has been found to have positive impacts, with employees more likely to share knowledge with others who have similar attributes. The implementation of social media can facilitate effortless and frequent knowledge sharing within organizations. Further research is encouraged to test the role of social media in organizational knowledge sharing. (Leonardi, Utz & Levordashka, Hwang et al.)

Next Steps

Creating and Sustaining a Global Community of Scholars

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We have an opportunity to transform the basic infrastructure of the MIS community. By changing the way we store, process, and distribute information, we can create a broader, more collaborative, and more productive community of MIS scholars, students, and practitioners.

This paper first briefly traces the history of scholarly communities and examines their development of an infrastructure for knowledge creation and distribution. After the shortcomings of our present infrastructure are addressed, some of the possibilities and the consequences of creating an MIS electronic community are discussed. In particular, the redesign opportunities made possible by the Internet (Kehoe, 1993) are investigated.

Watson R (1994) Creating and sustaining a global community of scholars. *MIS Q.*:225–231.

