

2023 Spring Faculty Workshop

Welcome!

Please sit at any table.



Today's Agenda

- ❖ Opening Prayer - Pastor James (Jim) Wetzstein
- ❖ Chat GPT - overview and breakouts
- ❖ University Budget Models
- ❖ Strategic Plan Updates
- ❖ Academic Program Structures
- ❖ Lunch and Socializing!





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WHAT (A) I DID THIS SEMESTER

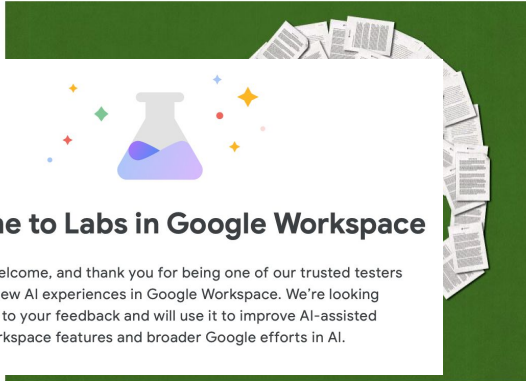
BY

MARTIN BUINICKI (?)

The College Essay Is Dead

Nobody is prepared for how AI will transform academia.

By Stephen Marche



Welcome to Labs in Google Workspace

You're in! Welcome, and thank you for being one of our trusted testers for the new AI experiences in Google Workspace. We're looking forward to your feedback and will use it to improve AI-assisted Workspace features and broader Google efforts in AI.

Paul Spella / The Atlantic; Getty

DECEMBER 2, 2022

Alarmed by A.I. Chatbots, Universities Start Revamping How They Teach

With the rise of the popular new chatbot ChatGPT, colleges are restructuring some courses and taking preventive measures.

Give this article 3.6K

Science Fiction Magazines Battle a Flood of Chatbot-Generated Stories

While the deluge has become a nuisance, the stories are easy to spot. The writing is "bad in spectacular ways," one editor said.

Give this article 158



The cover of Issue 193 of Clarke's World magazine. The publication recently halted open submissions because of a large increase in work created by A.I. bots. Daniel Conway, via Clarke's World



universities have been reluctant to ban the new tool. Todd Anderson for The New York Times

covers youth and technology from San Francisco, than 30 professors, students and university this article.

By Michael Levenson Feb. 23, 2023

THOMAS L. FRIEDMAN

Our New Promethean Moment

March 21, 2023

January 30, 2023

When AI Is Writing, Who Is the Author?

The language of co-authorship, taken from OpenAI's own terms and policies, can be useful in addressing the rise of AI writing in the classroom, Sean Ross Meehan writes.

By Sean Ross Meehan



Sam Altman @sama

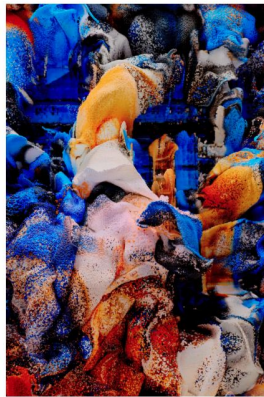
ChatGPT is incredibly limited, but good enough at some things to create a misleading impression of greatness.

it's a mistake to be relying on it for anything important right now. it's a preview of progress; we have lots of work to do on robustness and truthfulness.

6:11 PM · Dec 10, 2022

I'm a Congressman Who Codes. A.I. Freaks Me Out.

Jan. 23, 2023



Artist Retik Anadol's piece "Fluid Dreams" displays computer generated art at MoMA. Vincent Tullio for The New York Times

Give this article 724

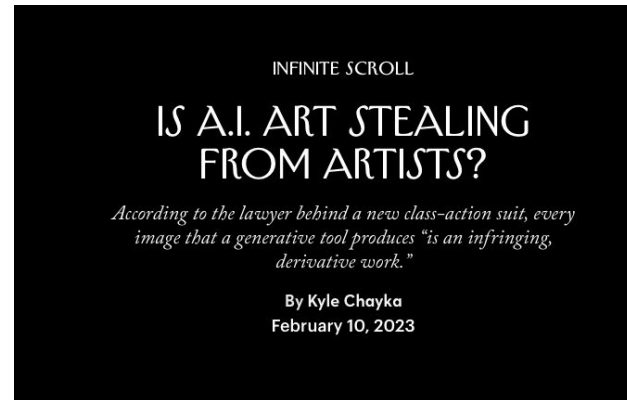
By Ted Lieu Mr. Lieu represents California's 36th Congressional District in the U.S. House of Representatives.

February 08, 2023

ChatGPT Is a Plague Upon Education

What winter of 2020 was for COVID-19, winter of 2023 is for ChatGPT—and higher education will never be the same, Jeremy Weissman writes.

By Jeremy Weissman

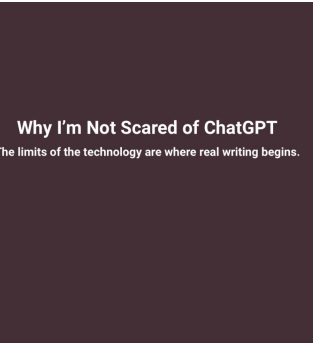


INFINITE SCROLL

IS A.I. ART STEALING FROM ARTISTS?

According to the lawyer behind a new class-action suit, every image that a generative tool produces "is an infringing, derivative work."

By Kyle Chayka February 10, 2023



Why I'm Not Scared of ChatGPT

The limits of the technology are where real writing begins.

ADVERTISEMENT



Oh dear friend, you ask of me
Whether a bagel for lunch is the key
To satisfy your midday hunger and glee
Let me ponder and answer thee

A bagel, a circle with a hole
Toasted, topped with cream cheese, it's a goal
Or perhaps with smoked salmon, a favorite stroll
But is it the best choice for your lunchtime role?

Consider the options, the possibilities
Of salads, soups, and sandwiches with varieties
Each with its own unique abilities
To nourish and fulfill your lunchtime necessities

So, my friend, the answer is yours to decide
Choose wisely, don't let hunger override
And may your lunchtime choice be one to abide
For a happy tummy and a smile inside.



write a social media post about the importance of diet. Make it good for Facebook



Here's a social media post on the importance of diet, perfect for Facebook:

Hey, Facebook family! Did you know that what you eat can have a significant impact on your overall health and well-being? A healthy diet is not just about weight loss, it's about nourishing your body with the right nutrients to function at its best.

Eating a balanced diet rich in whole grains, fruits, vegetables, lean proteins, and healthy fats can lower your risk of chronic diseases such as heart disease, diabetes, and certain cancers. It can also boost your immune system and improve your mood and energy levels.

On the other hand, a poor diet high in processed foods, sugar, and unhealthy fats can lead to weight gain, inflammation, and a host of health problems.

So let's make a conscious effort to choose whole, nutritious foods and limit our intake of junk food. Small changes can go a long way in improving our health and quality of life.

Let's nourish our bodies with the goodness it deserves! #HealthyEating
#NourishYourBody #GoodFoodGoodMood #EatWellLiveWell.





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MA

that's too long. make it shorter and funny



Sure thing, here's a shorter and funnier post on the importance of diet for Facebook:

Hey, Facebook friends! Eating junk food is like putting cheap gas in a Ferrari – it might work for a while, but eventually, it's going to break down. So let's fuel our bodies with nutritious food that keeps us running smoothly. Your health will thank you, and your taste buds might too! #EatWellFeelWell #HealthyEating #FuelYourBody.

MA

Propose a 3-month social media campaign promoting healthy diets. Use humor, and write for an audience ages 18-34.



Absolutely! Here's a 3-month social media campaign promoting healthy diets with humor, targeted at an audience aged 18-34:

Month 1: The "Healthy Eating Challenge"

We kick off the campaign with a fun and engaging "Healthy Eating Challenge." We encourage our audience to share pictures of their healthy meals using our branded hashtag and offer a prize for the most creative and nutritious meal. We also share easy and tasty recipes and nutrition tips to help our audience stay on track.

Social media posts:

- Are you up for the challenge? Share a picture of your healthy meal using our hashtag, and you could win a prize!
- Eating healthy doesn't have to be boring. Check out our Instagram page for delicious and nutritious recipes!
- Fun fact: Did you know that eating a rainbow of fruits and vegetables can provide your body with essential vitamins and minerals? Give it a try! #HealthyEatingChallenge #EatTheRainbow



MA

What can you tell me about martin buinicki



I'm sorry, but I couldn't find any significant information about a person named Martin Buinicki. It's possible that the person you're referring to is not well-known or has not made a significant impact in their field or industry.

If you have any additional information or context about Martin Buinicki, please feel free to provide it and I'll do my best to assist you.

MA

he's an english professor



I apologize for the confusion in my previous response. Unfortunately, I do not have any information about an English professor named Martin Buinicki. It's possible that he is not well-known in his field or has not published significant works that are widely recognized.



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Andrea Proulx Buinicki is an Assistant Professor of Mathematics at Valparaiso University in Indiana, USA. She received her PhD in Mathematics from the University of Maryland, College Park in 2015, and her research interests include algebraic combinatorics, representation theory, and Hopf algebras.

Buinicki has published several research articles in peer-reviewed journals, including the *Journal of Algebra*, *Communications in Algebra*, and the *Electronic Journal of Combinatorics*. She has also presented her research at numerous national and international conferences, including the American Mathematical Society (AMS) Joint Mathematics Meetings and the International Conference on Hopf Algebras and Tensor Categories.

In addition to her research and teaching at Valparaiso University, Buinicki is actively involved in promoting diversity and inclusion in mathematics. She has served on the executive committee of the Association for Women in Mathematics (AWM) and has organized several AWM events, including a panel discussion on gender bias in mathematics.



Questions to Ponder (Compare your answers with ChatGPT's some time!):

- What responsibilities do we have as educators and as citizens when it comes to AI? How do we fulfill them in the midst of all the other demands on our time?
- How do we ensure our students develop the skills necessary to question—and to employ—rapidly changing technologies like ChatGPT effectively, while still addressing the fundamentals of our disciplines?



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"STOCHASTIC PARROTS": A LINGUIST'S VIEW OF LARGE LANGUAGE MODELS

SALENA ANDERSON

New Media as “Collective Surgery”

“The new media and technologies by which we amplify and extend ourselves constitute huge collective surgery carried out on the social body with complete disregard for antiseptics”

(McLuhan, 1964, p. 64).



Source: <https://cptmed.com/sterilizing-your-surgical-tray/>

AI: Tool or Collaborator?

“As long as we adopt the Narcissus attitude of regarding the extensions of our own bodies as really *out there* and really independent of us, we will meet all technological challenges with the same sort of banana-skin pirouette and collapse. Archimedes once said, ‘Give me a place to stand and I will move the world.’ Today he would have pointed to our electric media and said, ‘I will stand on your eyes, your ears, your nerves, and your brain, and the world will move in any tempo or pattern I choose.’ We have leased these ‘places to stand’ to private corporations” (McLuhan, 1964, p. 68).



To read more:

S. Anderson, “‘Places to Stand’: Multiple Metaphors for Framing ChatGPT’s Corpus” in Computers and Composition (forthcoming)

McLuhan, M. (1964). *Understanding media: The extensions of man*. MIT press.

Image source: <https://en.wikipedia.org/wiki/Calculator>

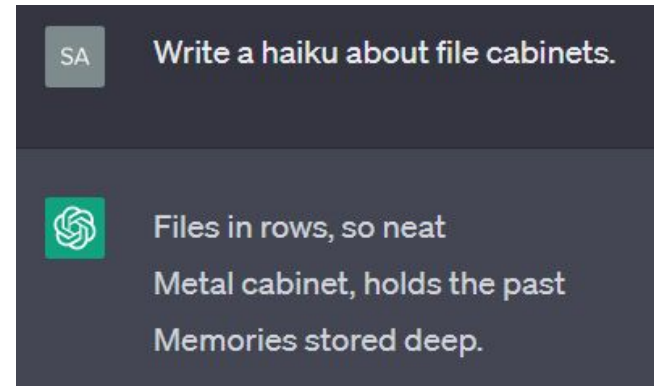


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Am I a Co-author?

According to *Harvard Business Review*, “While it may seem like these new AI tools can conjure new material from the ether, that’s not quite the case. Generative AI platforms are trained on data lakes and question snippets — billions of parameters that are constructed by software processing huge archives of images and text. [...]”

Source:
<https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem>



“This process comes with legal risks, including intellectual property infringement. In many cases, it also poses legal questions that are still being resolved. For example, does copyright, patent, trademark infringement apply to AI creations?”

Toward Critical Digital Literacy

“A reconceptualised critical digital literacy might therefore provide opportunities to consider and critique the broader social, political and economic issues, alongside programmes that seek to develop technical mastery. Rather than contextually bound notions of ‘skills’ and ‘practices’, a critical disposition would be transferable across digital contexts and consequently more relevant to the fast-paced realities of everyday digital contexts and digital practices. [...] This prevents digital practices and tools from appearing as a series of ‘natural’, inevitable processes which become uncritically inscribed into daily life. The challenge for critical digital literacy, however, lies in encouraging the individual to move between these mindsets (i.e., critical and technical) as part of their digital practices” (Pangrazio, 2016, p.

169-170).

Pangrazio, L. (2016). Reconceptualising critical digital literacy. *Discourse: Studies in the cultural politics of education*, 37(2), 163-174.



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What's at Stake?

As Lamott advises writers in her tribute to “shitty first drafts”:

“Just get it all down on paper....There may be something in the very last line of the very last paragraph on page six that you just love, that is so beautiful or wild that you now know what you're supposed to be writing about, more or less, or in what direction you might go—but there was no way to get to this without first getting through the first five and a half pages” (528-529).

Lamott, A. (1995). *Bird by bird: Some instructions on writing and life*. Anchor.



Student Learning: “Cognitive Processes in Writing to Learn”

Arnold, et al. (2017) “highlight[] the mnemonic benefits of retrieval, consistent with past work from cognitive psychology (e.g., Carrier & Pashler, 1992; Glover, 1989; Roediger & Karpicke, 2006b). Learning was greater following retrieval of learned information, as occurred when students wrote essays or recalled the passages, but not when students highlighted or took notes” (p. 31)

Cognitive Processes

Learning Activities	Writing Task	Reorganization	Elaboration	Retrieval
Highlighting	No	No	No	No
Note-Taking	Yes	Unlikely	Unlikely	No
Free Recall	Yes	Unlikely	Unlikely	Yes
Essay	Yes	Yes	Yes	Yes

Arnold, K. M., Umanath, S., Thio, K., Reilly, W. B., McDaniel, M. A., & Marsh, E. J. (2017). Understanding the cognitive processes involved in writing to learn. *Journal of Experimental Psychology: Applied*, 23(2), 115.



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**FUDGING THE TURING TEST:
HOW IT GETS PAST THE TEACHER'S
HOOEY-FILTER**

MICHAEL GLASS

Language Models: the likelihood of a sequence of words



“Eyes awe of an”

“I saw a van”



From the noises that came out of your mouth *both* are possible.

Which of these is more likely that somebody would say it?

A language model is the technology which picks which of the two possible sentences is more likely.

$\text{Prob}(\text{“I saw a van”}) > \text{Prob}(\text{“Eyes awe of an”})$

Example from Jurafsky and Martin, *Speech and Language Processing*.



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Language models are applied in service of language tasks we use everyday.

- Speech recognition: finding most plausible utterance
- Translating: picking among possible sentences in the target language to make a fluent utterance
- Spelling correction: helps decide likely replacement word based on the surrounding part of a sentence
- Writing aids, grammar correction, ...



Models can generate text also

() Start with a couple of words.

I want

() Pick a high-probability next word

I want -> to

() next word?

I want to -> eat

() next word? (pick one)

I want to eat -> { lunch, my, Chinese,
potatoes ... }



We can train a simple next-word model using the works of Shakespeare. Then create more Shakespeare.

*Fly, and will rid me these news of price.
Therefore the sadness of parting, as
they say, 'tis done.*

*This shall forbid it should be branded, if
renown made it empty.*



The above are actual examples, using a 3-word window to pick a likely next word.

(If you use a 4 word window it ends up plagiarizing Shakespeare pretty quickly.)

Example from Jurafsky and Martin, *Speech and Language Processing*.



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ChatGPT3 Training Corpora: Getting Good Examples

Dataset	Quantity (tokens)	Weight in training mix	Epochs elapsed when training for 300B tokens
Common Crawl (filtered)	410 billion	60%	0.44
WebText2	19 billion	22%	2.9
Books1	12 billion	8%	1.9
Books2	55 billion	8%	0.43
Wikipedia	3 billion	3%	3.4

Table 2.2: Datasets used to train GPT-3. “Weight in training mix” refers to the fraction of examples during training that are drawn from a given dataset, which we intentionally do not make proportional to the size of the dataset. As a result, when we train for 300 billion tokens, some datasets are seen up to 3.4 times during training while other datasets are seen less than once.

Source: Brown, Tom, et al. "Language models are few-shot learners." *Advances in neural information processing systems* 33 (2020): 1877-1901.

- Lot of text → cover the known universe of topics and words. (Not just Shakespeare.)
- *Accurate* text → more likely that combinations of words = true facts.
- Wikipedia, collections of books (edited volumes) are believed mostly accurate, The web crawl was filtered for sites similar to known-accurate sources.
- Oversample Wikipedia and better book collection, undersample general web.

But still generated text is B.S.-ing, putting words together

Reference from student paper

↓↓ **Nwankwo, Kalu real names** **Title phrases** ↓ **from real papers**
[2] Nwankwo, S. E., & Kalu, K. A. (2020). The New Scramble for Africa: The Influence of External Actors on Africa's Development. Journal of African Business, 21(3), 410-427. <https://doi.org/10.1080/15228916.2020.1775544>

↑↑ **Realistic bogus doi**

Article
Inclusive Business Models in Agri-food Value Chain
Claude Ménard & Wytse Vellema
Pages: 395-415
Published online: 06 Sep 2019
Abstract | Full Text | References | PDF (1652 KB) | EPUB |

← **Real journal,
table of contents
vol 21(3)
pp. 395-415**

(pp. 410-427 not here)

Article
Factors Influencing the Growth of Small and Medium Enterprises in Ghana >
Fortunatus Moo & Alex Eyah
Pages: 416-431
Published online: 29 Jul 2019
Abstract | Full Text | References | PDF (1133 KB) | EPUB |

pp. 416-431

**(No such paper
in Google
Scholar either)**



More B.S.-ing

From a student essay explicating an example of “coordinated inauthentic behavior” (i.e. information warfare):

According to Facebook, the Fishwrap campaign was a network of accounts and pages that engaged in deceptive behavior to promote content and influence public opinion on various issues. The campaign primarily targeted audiences in the Philippines and had some activity in other countries in the region [1][2].

[1] Facebook Newsroom. (2021, August 10). Fishwrap: The Inauthentic News Sites Pushing a Pro-Opposition Narrative in the Philippines. Retrieved from <https://about.fb.com/news/2021/08/fishwrap-inauthentic-news-sites-philippines/>

Words in URL are made up ↑ to be consistent with rest

- **Assembled phrases and sentences from real Facebook summaries of coordinated inauthentic behavior.**
- **This C.I.B. event is B.S.**



One more, a simple one

– *When did France gift Lithuania Vilnius TV tower?*

France gifted Lithuania the Vilnius TV tower in 1980.

– *What prompted the French government to provide the gift?*

The French government provided the gift as a gesture of friendship and solidarity with the Lithuanian people, who had recently declared independence from the Soviet Union.

In reality the tower was a gift of the Soviet Union.

1980 is correct, but that was a decade before declaring independence.

Example from Vilius Petkauskas, *ChatGPT's answers could be nothing but a hallucination*, CyberNews, March 6, 2023.



Conclusion

These large language models are an astonishing advance in language processing.

They grew from a technology which we use every day in speech recognition, spelling correction, etc. where few people question their utility or benefits.

We generally regard language as the representation of thought: every paragraph is a thought that went through somebody's mind as they wrote it.

But the “thought” in these models is: what's the the most plausible string of words it can say.



Breakout Groups

Creative Uses of AI in Classroom: Ballroom

Writing Assignments and AI: Brown and Gold Room

Ethics and Misinformation: Heritage Room

Academic Integrity and AI: Alumni Room

Welcome back! Discussion Questions

1. What aspects of writing do you feel are most important, and what most excites or concerns you about how ChatGPT may affect the student writing process?
2. What makes you curious about generative AI? How can you imagine bringing that curiosity to the classroom?
3. How is brainstorming with ChatGPT different from brainstorming with a peer, reading scholarly sources for ideas, or generating ideas on your own?
4. ChatGPT makes use of thousands of uncited sources, some of which are copyrighted, and without giving credit to the authors. How do we talk about the use of this technology in our classrooms in a way that is compatible with our understanding of academic discourse?
5. How can an honor system coexist with AI technology?



What Questions are Still Unanswered?

A screenshot of the desktop version of the Tophat login page. The page title is "Log in to access this course" for a "Demo Course" at "Texas Tech University". It features two main sections: "Log in with an existing account" with fields for "Email" and "Password", and "Anonymous 'Guest' Access" with a note that "Guest activity will be erased when you log out." and an "Enter as a Guest" button. A red arrow points to the "Enter as a Guest" button.A screenshot of the mobile version of the Tophat login page. It shows the same "Log in with an existing account" section with "Email" and "Password" fields and a "Login" button. Below this is the "Anonymous 'Guest' Access" section with a note and an "Enter as a Guest" button. A red arrow points to the "Enter as a Guest" button.

Please take some time to share your questions and comments about the future of AI:

- Enter as a guest: Use the QR Code above
- Enter as a guest: Use the following URL: <https://app.tophat.com/e/985866>

Or

- Text 9234 and your reply to (315)636-0905
 - E.g. 9234 One more thing...



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