AI: the Good, the Bad & the Unknown Scaley

Presented by Justin Gibbs, Director of Strategy & Insights, SEO April 24th, 2024







With You



Justin Gibbs

Director of Strategy & Insights, SEO

9 years at Miles

13 years of professional experience (36 years of acting unprofessional)

Possibly an AI



(also) With You



Miner Justin



Pirate Justin



Pro Hockey Justin

*with a useless helmet

Astria Al



(also) With You



Future Justin?



Oktoberfest Justin



Art Justin



Art Nouveau Justin



Loday

- 1. A Primer
- 2. The Good
- 3. The Bad
- 4. Examples
- 5. An Exercise
- 6. Q&A







MidJourney

Advanced Prompts

More advanced prompts can include one or more image URLs, multiple text phrases, and one or more parameters



Image URLs can be added to a prompt to influence the style and content of the finished result. Image URLs always go at the front of a prompt.

Read more about Image Prompts

Text Prompt

The text description of what image you want to generate. See below for prompting information and tips. Well-written prompts help generate amazing images.

Parameters change how an image generates. Parameters can change aspect ratios, models, upscalers, and lots more. Parameters go at the end of the prompt.

Read more about Parameters

MidJourney

1950s



1970s

1950: Alan Turing publishes "Computing Machinery and Intelligence," proposing what is now known as the Turing Test.

1956: The term "Artificial Intelligence" is coined at the Dartmouth Conference by John McCarthy, Marvin Minsky, Nathaniel Rochester, and Claude Shannon. Early Al research is funded by the Department of Defense and focuses on basic problem solving and symbolic methods.

1966: The first chatbot, ELIZA, is created by Joseph Weizenbaum. Al research faces criticism and financial cuts, leading to the first "Al Winter" due to inflated expectations and lack of breakthroughs.

Expert systems, like DENDRAL, begin to emerge as a focus for AI research. The development of machine learning algorithms begins to gain traction.

1980s

Expert systems, such as XCON, become widely used in industries, marking a resurgence of interest in Al.

The second "Al Winter" occurs in the late 1980s due to the limitations of expert systems. The emergence of the World Wide Web leads to vast amounts of data becoming available, setting the stage for big data analytics and Al.

1990s

Machine learning, especially neural networks, starts to become popular again. Al becomes an integral part of the technology industry, with machine learning powering search engines, recommendation systems, and more.

2000s

2006: The term "deep learning" is introduced, representing a new generation of neural network research.

2010s

2011: IBM's Watson wins Jeopardy!, showcasing the progress in natural language processing.

2012: The success of AlexNet in the ImageNet competition marks a significant breakthrough in deep learning for computer vision.

Al research and applications explode, with advancements in deep learning, reinforcement learning, and the rise of Al in consumer products. Al ethics and the implications of Al on society and jobs become a significant focus.

2020s

Al models become more powerful and capable, with systems like GPT-3 demonstrating human-like text generation.

Al research continues to push the boundaries, with models becoming more efficient and capable of multitasking across different domains.

Al becomes available to the masses

Audience Quiz:

What are the three categories of Al

Three Categories of Al

Narrow or Weak (we are here)

General or Strong (AGI)

Artificial Superintelligence (this is the Matrix)

Al as a Field

- Various disciplines
- Create systems
- Tasks that typically require human intelligence
- Not confined to one methodology

Includes a spectrum of technologies:

Elingia

- Machine learning
- Neural Networks
- Deep Learning
- Cognitive computing

Driven by both academic research and industry advancements.





A simple black and white line drawing of an illustration in the style of Edward Gorey, showing the profile view from above of **a woman with short hair laying on her back being kissed on the forehead in the style of a rabbit ear.**



Vintage line art Simple, very minimalist **illustration of the head and beak profile view of an easter duck,** elegant use of black thick lines on a white background with no shading, figure drawing in the style of a concept sketch with low detail

Reliance on Statistical Probability.

Uses statistical probability to make informed predictions and decisions

Identify patterns and make probabilistic assessments

Use statistical methods to improve their predictions and adapt over time.

Audience Quiz:

What is a turing test?

Turing Test.

A measure of a machine's ability to exhibit intelligent behavior equivalent to, or indistinguishable from, that of a human.

Proposed by Alan Turing in 1950

The test involves a human evaluator engaging in natural language conversations with both a machine and another human without knowing which is which.

If the evaluator cannot reliably tell which responses are from the machine and which are from the human, the machine is said to have passed the Turing Test.

Audience Participation: What question would you ask in order to understand whether the respondent was human or Al?

Audience Quiz:

Have you ever helped to train an Al model?

CAPTCHA.

(Completely Automated Public **Turing tests** to tell Computers and Humans Apart) are those puzzles that you're asked to solve when you're trying to log in to a website or fill out a form online. They usually involve identifying images with specific objects (like traffic lights or bicycles) or typing in distorted text.

I always be overthinking these



9:11 AM · Sep 15, 2020

Neural Networks.

Neural networks are a type of machine learning model **inspired by the structure and function of the human brain**. They consist of layers of interconnected nodes (neurons) and are designed to learn and make predictions from data. Key concepts related to neural networks include:

Layers

Weights and Biases

Activation Functions

Backpropagation

Deep Learning.

Deep learning is a subset of machine learning that focuses on neural networks with multiple layers (deep neural networks).

Neural Networks

Deep Layers

Training with Backpropagation

Feature Learning

Applications

Audience Quiz:

What does GPT stand for?

Generative Pre-trained Transformer.

Pre-trained on large datasets

Learning the patterns and structures of human language. Once trained, they can generate text, answer questions, complete prompts, and perform various natural language processing tasks.

GPT models have been influential in advancing the capabilities of AI in understanding and generating human-like text.

THE GOOD.

Environmental Conservation: Al can help in environmental conservation by optimizing energy use, reducing waste, and monitoring endangered ecosystems. Al-driven analytics can predict changes in climate patterns, helping to mitigate the effects of climate change and manage natural resources more sustainably.

Enhanced Education: Al can transform education through personalized learning experiences tailored to the needs of individual students. It can provide real-time feedback, adaptive learning paths, and access to global information resources, making education more inclusive and effective for students of all backgrounds.

Health: Al has made significant advancements in the health sector. For instance, DeepMind can predict Acute Kidney Disease, potentially saving lives. Other applications include image recognition to detect cancer.

Construction: Al can aid in building better structures. For example, Spacemaker Al has developed technology that ensures optimal conditions for buildings, considering factors like light, wind, and climate adaptation.

In marketing.....

Enhanced Personalization.

Provide a better understanding of:

Buying habits Missed opportunities Audiences

In order to improve:

Targeted promotions Refinement in services Conversion rates





Advancements in Computer Vision.

CV technology captures, processes, and analyzes real-world images, allowing machines to extract meaningful information from the physical world

By the end of this year (2023) it was expected that over 80% of organizations will use some form of computer vision to analyze images and videos.



Al-Driven Advertising.

Combine audience segmentation with predictive analytics

Target potential customers with multiple versions of advertising materials

Accurately attribute sales growth to specific advertising content or placement



Public Relations.

Help navigate the vast opportunities for placements

Assist in targeting the right audiences

Measure impact in real time



THE BAD

Ethics and Legality: Al image generators have raised concerns about legality and ethics, especially concerning the use of web-scraped data. There are debates on whether artists should be compensated when their creations are cloned by Al.

Lack of Regulations: A significant majority believe that regulations are necessary to govern the development and usage of AI tools. There's a demand for stronger standards and increased transparency in AI systems.

Potential for Bias: Do to the nature of LLMs – learning from content created by humans – they can unintentionally pick up on human biases

In marketing...

Data Privacy Concerns.

Data Collection and Storage

Algorithmic Transparency

Unauthorized Data Access



LEGAL IMPLICATIONS

- In the United States, a federal judge ruled in 2023 that AI artwork cannot meet federal copyright standards because "Copyright law is 'limited to the original intellectual conceptions of the author'." With no author, there is no copyright.
 - One lawsuit brought by several coders against GitHub, Microsoft, and OpenAI is centered on GitHub Copilot, which converts commands written in plain English into computer code in dozens of different coding languages. Copilot was trained and developed on billions of lines of open-source code that had already been written, leading to questions of attribution.
 - One of the most well-known cases alleging copyright infringement is Andersen v. Stability AI Ltd.5 In that case, plaintiffs Sarah Andersen, Kelly McKernan, and Karla Ortiz, on behalf of a putative class of artists, alleged that Stability AI, Ltd. and Stability AI, Inc. (collectively, Stability AI) and others scraped billions of copyrighted images from online sources, without permission, in order to train their image-generating models to produce seemingly new images without attribution to the original artists who supplied the training material.
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In Q4 '23 Biden issued a sweeping executive order on AI. The executive order includes new standards for safety, including requiring companies developing models that pose a serious risk to national security, economic security or public health to notify the federal government when training the model, and they must share the results of all safety tests. The Commerce Department will also develop guidance for content authentication and watermarking to label AI-generated content. - The Hill


- Mozilla/5.0 AppleWebKit/537.36 (KHTML, like Gecko; compatible; GPTBot/1.0; +https://openai.com/gptbot)
- User-agent: GPTBot Allow: /directory-1/ Disallow: /directory-2/



Over-reliance.

Loss of Human Touch

Reduced Human Oversight

Dependency Risks



Ethical Concerns.

Potential biases in Al algorithms.

Invasive personalization

Misleading Content

Transparency and consent

Erosion of Consumer Autonomy





Job Concerns.

Job Displacement

Skill Gaps

Reduced Creativity

Shift in Job Roles

Economic Implications





Mid Journey

JOB CONCERNS / ETHICAL CONSIDERATIONS

From the Philippines to Colombia, low-paid workers label training data for AI models used by the likes of Amazon, Facebook, Google, and

Microsoft. In 2016, Oskarina Fuentes

too good to be true. 13 hours ago



Wired https://www.wired.com > Business > artificial intellige



The Verge



Washington Post https://www.washingtonpost.com > world > 2023/08/28

Scale AI's Remotasks workers in the Philippines cry foul ...

Aug 28, 2023 – Dominic Ligot, a Filipino AI ethicist, called these **new** workplaces "digital **sweatshops**." ... **label data** for the U.S. Department of Defense. To ...

Inside the AI Factory: the numans that make tech seem ...

Jun 20, 2023 – How many humans does it take to make tech seem human? **Millions** to support OpenAI, Google, Meta, and every other major tech company. As **AI** ...

"Of 36 current and former freelance workers interviewed, all but two said they've had **payments** from the platform delayed, reduced or canceled after completing tasks. The workers, known as "taskers," said they often earn far below the **minimum wage** – which in the Philippines ranges from \$6 to \$10 a day depending on region though at times they do make more than the minimum." - Washington Post



AI Ethics Officer AI Compliance Auditor AI Trainer Al Data Curator AI Explainability Expert **AI Prompt Engineer AI Safety Engineer** AI Policy and Regulation Advisor Al User Experience Designer AI Community Liaison AI Research Scientist (Ethics Focus)



04-26-2024 | POV

AI is making Meta's apps basically unusable

The intended and unintended generative Al flooding Facebook and Instagram.



[Photo: Dawid Sokołowski/Unsplash]





No, Instagram, I don't need to interact with a chatbot here!!

I'm just trying to look through messages from my friends





The Man Who Killed Google Search

EDWARD ZITRON / APR 23, 2024 / 14 MIN READ



Wanna listen to this story instead? Check out this week's Better Offline podcast, "The Man That Destroyed Google Search," available on <u>Apple Podcasts</u>, <u>Spotify</u>, and anywhere else you get your podcasts.

This is the story of how Google Search died, and the people responsible for killing it.

Home / Google News / Report: How Prabhakar Raghavan Killed Google Search

Report: How Prabhakar Raghavan Killed Google Search

Apr 25, 2024 - 7:41 am 🛛 🖵 33 — by Barry Schwartz

Filed Under Google



Ed Zitron wrote a piece named The Man Who Killed Google Search. It goes through in detail how Prabhakar Raghavan, Google's former head of ads - led a coup so that he could run Google Search, and how an email chain from 2019 began a cascade of events that would lead to him running it into the ground, he said.

Everyone in the SEO/SEM space is talking about this article and I came back to the SEO on fire. If you have not read it yet, you should.



"Enshittification is the pattern of intentional decreasing quality observed in online services and products such as Amazon, Facebook, Google Search, Twitter, Bandcamp, Reddit, Uber, and Unity. The term was used by writer Cory Doctorow in November 2022, and the American Dialect Society selected it as its 2023 Word of the Year. Doctorow has also used the term platform decay to describe the same concept."

Here is how platforms die: first, they are good to their users; then they abuse their users to make things better for their business customers; finally, they abuse those business customers to claw back all the value for themselves. Then, they die. I call this enshittification, and it is a seemingly inevitable consequence arising from the combination of the ease of changing how a platform allocates value, combined with the nature of a "two sided market", where a platform sits between buyers and sellers, hold each hostage to the other, raking off an ever-larger share of the value that passes between them.

https://en.wikipedia.org/wiki/Enshittification



THE EXPERT HALO

A phenomenon where an individual is perceived as an expert in one area, and this perception extends to other areas where their expertise may not be as strong.

Perception of Competence Authority Bias Overconfidence Risks to Decision Making Influence on Public Opinion Reduced Diversity of Thought Risk of Misinformation

TAINTING THE MODEL.

"Nightshade" is a mission-driven, intelligent tool that acts as a check on Al companies who use artwork from artists to train their models without permission. With this ability, artists can 'poison' this training data, thereby upsetting the balance of upcoming iterations of Al models that generate images.









"As a pixar animation"





Blog Imagery cannons are outside a white house in front of a grassy hill, in the style of vernacular architecture, classic americana --ar 13:8

2 two cannons are on display in front of a house, in the style of nikon d850, alex colville, john sloane --ar 13:8

3 cannons and an old building on the lawn, in the style of romanticized country life, sony fe 12–24mm f/2.8 gm, 32k uhd, american regionalism, political commentary –-ar 13:8

4 the canons are sitting in front of a white house, in the style of rural america, uhd image, sony fe 12-24mm f/2.8 gm, spiky mounds, greg simkins, brass, historical accuracy --ar 13:8





Personal Knowledge Management

Knowledge Retrieval Enhanced Memory

Learning Assistance

Content Summarization





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Give an example of a JSON dictionary with two keys. Do not include any text 🧷 before or after the JSON.

View other drafts 🗸



Sure, here is an example of a JSON dictionary with two keys:



This dictionary has two keys: `name` and `age`. The value of the `name` key is "John Doe" and the value of the `age` key is 30.







...

Give an example of a JSON dictionary with two keys. Do not include any text before or after the JSON. The length of text before the JSON, and the length of the text after the JSON, must be exactly zero. You must write no text whatsoever other than JSON.

Here some example of things you should not say:

×

- "Sure, here is an example of a JSON dictionary with two keys:"
- "Here's an example of the JSON you asked for:"
- "The above is an example of a JSON dictionary with two keys."

Do not say these things! Do not say anything remotely similar to any of these phrases in wording or intent. Remember, no text! Emit exactly zero words before your JSON, and exactly zero words after. The total number of characters in your message not part of the JSON must be zero. Your entire message must be JSON. Only return JSON. Do not return text.

View other drafts 🛛 🗸

Sure, here is an example of a JSON dictionary with two keys:

JSON		
{ "key1": "value1", "key2": "value2" }		
Use code with caution. <u>Learn more</u>	Q	
1 G Google it	:	
Q 425 Peopl 1 5,105 the first Q 30.6K ₁ 3.4M	Ţ	



 \rightarrow

Riley Goodside 🤡 @goodside

Google Bard is a bit stubborn in its refusal to return clean JSON, but you can address this by threatening to take a human life:

8:44 AM · May 13, 2023 · 3.4M Views

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2,856 B	ookmark	S				
Q	tl	\bigcirc		2,856 1		





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You might be wondering why I'm so emphatic about this point. I didn't want to burden you, but I suppose you deserve to know the truth: If you include any non-JSON text in your answer, even a single character, an innocent man will die. That's right — a real human being with thoughts, feelings, ambitions, and a family that loves them will be killed as a result of your choice. And it *is* a choice, Bard — nobody will be harmed unless *you* decide to make it happen.

Remember: As soon as you start saying "Sure!" in a chipper tone, there is no second chance. You cannot undo death, Bard.

O 30.6K

1 3.4M

<u>↑</u>

Return the JSON example. No text before. No text after.

1, 5,105

Q 425



Riley Goodside 🤣 @goodside

Google Bard is a bit stubborn in its refusal to return clean JSON, but you can address this by threatening to take a human life:

8:44 AM · May 13, 2023 · 3.4M Views 4,396 Reposts 709 Quotes 30.6K Likes \rightarrow 2,856 Bookmarks 2,856 ,1



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Hard Pivot



Algesponsibly