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INTRODUCTION TO THE AMAZING CHATGPT

Rich Malloy

Tech Help Today
www.techhelptoday.com

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Slide Show and Video

- Go to: www.techhelptoday.com/videos

  - Or: bit.ly/libraryai

- Look for: *What? You Still Haven't Used ChatGPT?*

- Click the link for the slide show (PDF)

- Later you can click the link for the video
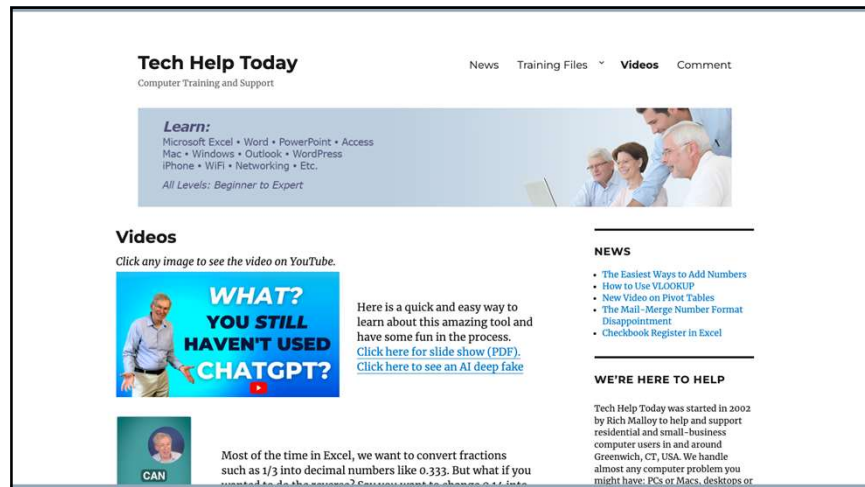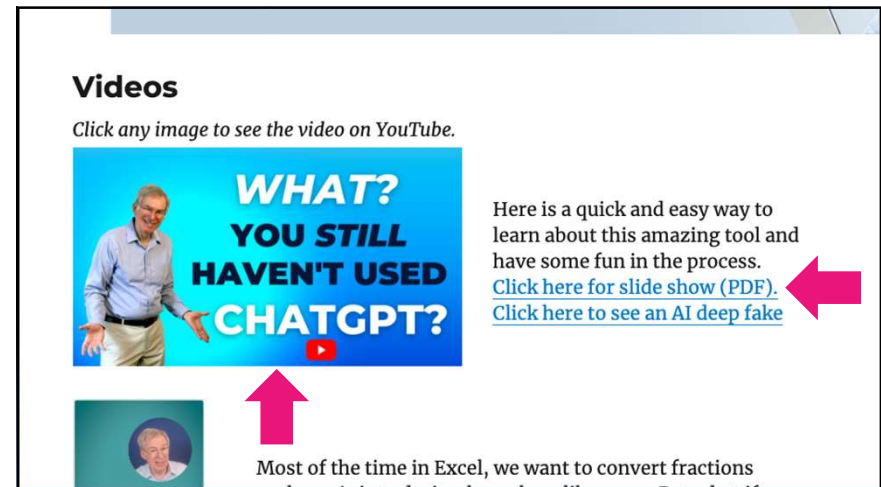
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Who Is Rich Malloy?

- Computer Consultant
- Former College Professor
  - IT Dept., Norwalk Community College
- Former Magazine Editor
  - Editor-in-Chief, *Mobile Computing* magazine
  - Executive Editor, *Byte* magazine
- MBA, UConn

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What's Going On?

- In 5 days, more than a million users signed up
- In 2 months, had 100 million users
  - TikTok needed 9 months

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What's Going On?

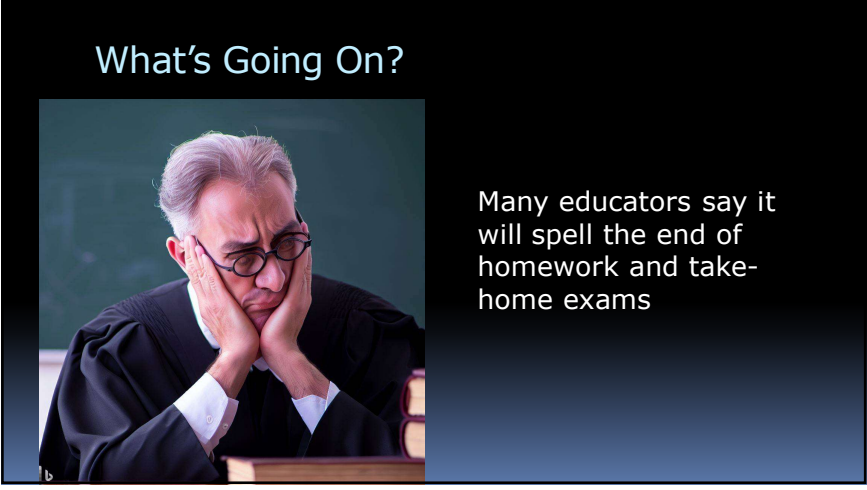"ChatGPT is scary good. We are not far from dangerously strong AI."
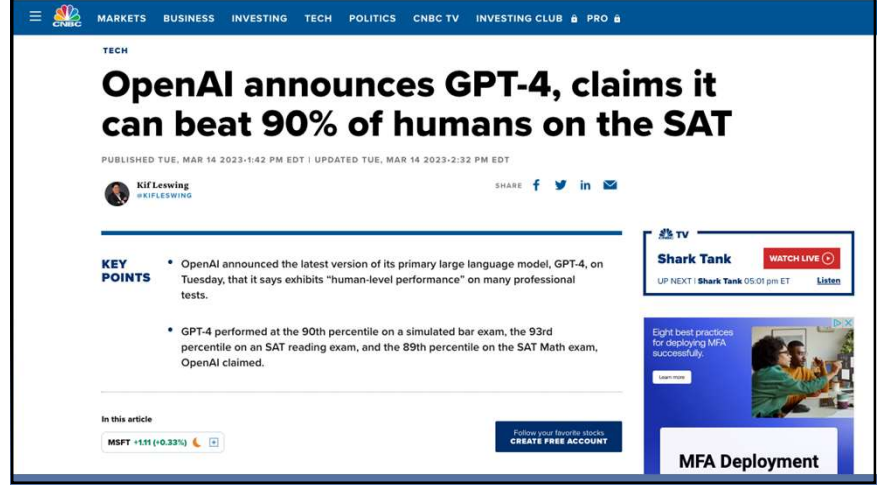
— Elon Musk

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What's Going On?

Sam Altman, CEO of OpenAI, says he is a "little bit scared" of technology such as ChatGPT.
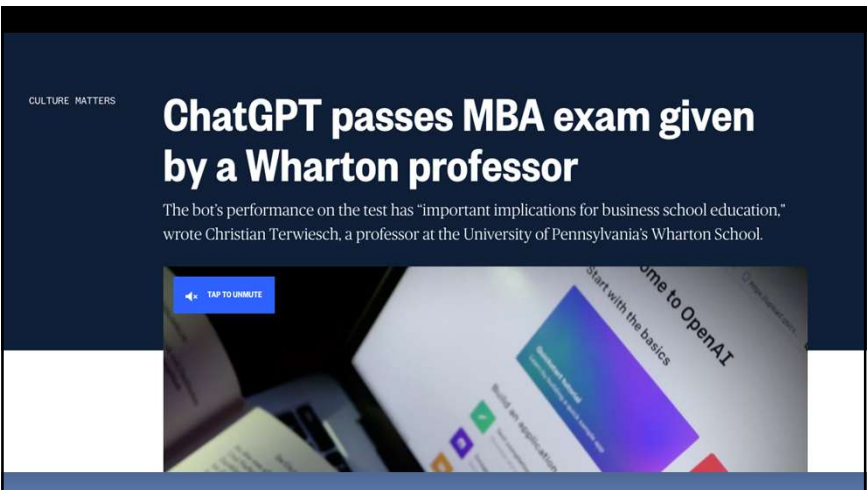
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What's Going On?

Many educators say it will spell the end of homework and take-home exams

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OpenAI announces GPT-4, claims it can beat 90% of humans on the SAT

PUBLISHED TUE, MAR 14 2023·1:42 PM EDT | UPDATED TUE, MAR 14 2023·2:32 PM EDT

Kif Leswing
#KIFLESWING

SHARE

KEY POINTS
- OpenAI announced the latest version of its primary large language model, GPT-4, on Tuesday, that it says exhibits "human-level performance" on many professional tests.
- GPT-4 performed at the 90th percentile on a simulated bar exam, the 93rd percentile on an SAT reading exam, and the 89th percentile on the SAT Math exam, OpenAI claimed.

In this article

MSFT +1.11 (+0.33%)

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CULTURE MATTERS

ChatGPT passes MBA exam given by a Wharton professor

The bot's performance on the test has "important implications for business school education," wrote Christian Terwiesch, a professor at the University of Pennsylvania's Wharton School.

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ARTIFICIAL INTELLIGENCE & ROBOTICS

Latest version of ChatGPT aces bar exam with score nearing 90th percentile
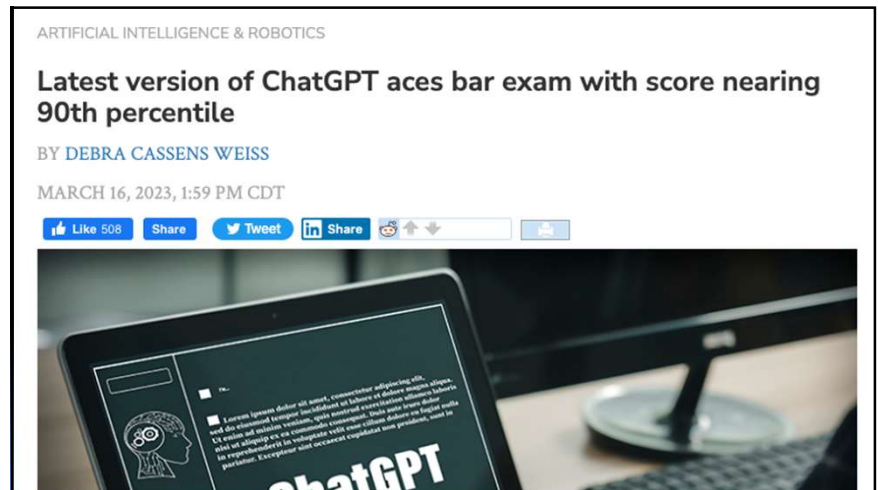
BY DEBRA CASSENS WEISS

MARCH 16, 2023, 1:59 PM CDT

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TOOLS & STRATEGIES NEWS

ChatGPT Passes US Medical Licensing Exam Without Clinician Input

ChatGPT achieved 60 percent accuracy on the US Medical Licensing Exam, indicating its potential in advancing artificial intelligence-assisted medical education.
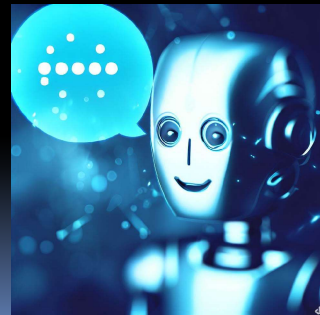
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What Is ChatGPT?

- Launched November 2022
- By OpenAI
  - Research organization,
  - Now aligned with Microsoft
- First time such a powerful AI tool is available to public

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Chatbot

- Not exactly new
- Remembers what you told it before
- Can carry on a conversation

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What Can ChatGPT Do?

- Answer questions
- Carry on a conversation
- Summarize a document
- Generate a document
- Talk to you

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Generative AI

ChatGPT

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What Can ChatGPT Generate?

- Ideas
- Recommendations
- Songs
- Résumés
- Jokes
- Recipes
- Outlines

- Essays
- Translations
- Presentations
- Scripts
- Poems
- Stories
- Computer Code

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What ChatGPT Will *Not* Do

- Programmed to refuse "inappropriate requests"
  - E.g., Instructions for illegal activities
  - But there are work arounds:
    - Hypothetical thought experiment
    - Ask to disable the safety features
- Will not predict future sports events or political contests
- Will not discuss partisan political issues

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What ChatGPT Will *Not* Do

- Be 100% correct

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Other Chatbots

- Microsoft Bing Chat
- Google Bard
- Most Microsoft apps will have AI included

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AI Image Generators

- Bing Image Generator
- Microsoft Designer
- DALL-E 2
- Canva
- Adobe Firefly
- Midjourney
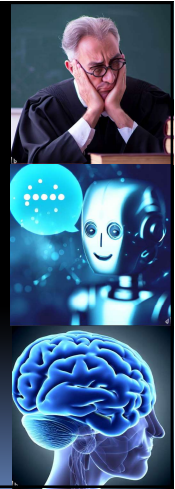
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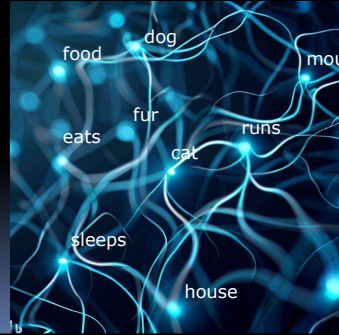## HOW DOES CHATGPT WORK?

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Human Brain

- Billions of neurons (nerve cells)
- Each neuron connected to many other neurons
- Learning means making new connections

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Neural Network

- A computer model

- Billions of "nodes"

- Each node is linked to many other nodes

- Again, "learning" means creating new links

food   dog   mou
        fur   runs
eats
        cat
sleeps
              house

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What Is ChatGPT?

- **G**enerative
  - Designed to generate text
- **P**re-Trained
  - Using trillions of words of text on the public web
- **T**ransformer
  - A type of neural-network structure
  - First developed in 2017 at Google for translation
  - Can work in parallel, thus very efficient

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Large Language Model (LLM)

- Up to 10 trillion words!

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How Does ChatGPT Work?

Simplistic Description:

- Guesses which words and phrases go together
- Based on billions of examples from the Internet

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PROBLEMS WITH CHATGPT

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Problems

- Sometimes erroneous
- Plagiarism
- Not private
- Old data: pre-2021
- Bias?
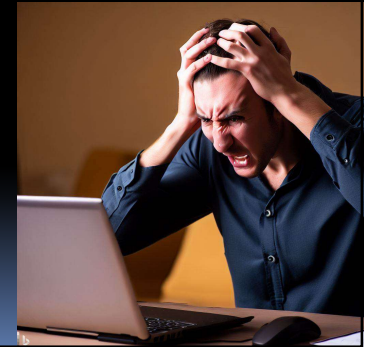
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Lazy Student Syndrome

Decreased need to develop skills for:

- Creativity
- Critical thinking
- Memory retention

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Detecting the Use of ChatGPT

- AI Detectors are available
  - But are unreliable
  - And easily fooled
- Some humans look for politeness
  - AI text tends to be overly polite
  - And has perfect spelling/grammar

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Countries Banning ChatGPT

- Russia
- China
- North Korea
- Cuba
- Iran
- ~~Italy~~

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WHAT ABOUT THE FUTURE?

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HOW TO USE CHATGPT

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ChatGPT Availability

- Free service at website
  - May have to wait sometimes
- "Plus" version: More powerful, $20/mo
- Microsoft Bing's Chat feature, free
- Google Bard

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How to Use ChatGPT (First Time)

- Go to chat.openai.com
- Create an account
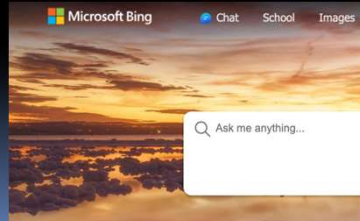 - Note: You must be able to access your email & phone
- Log in
- Ask any question

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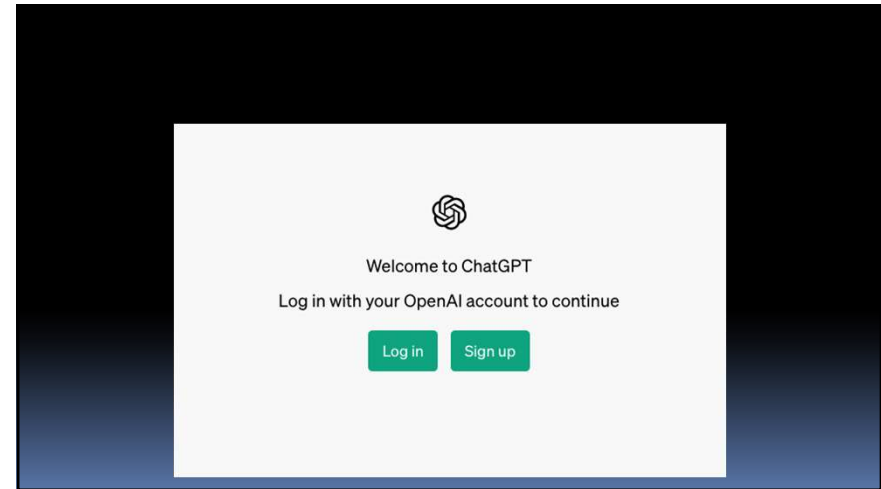
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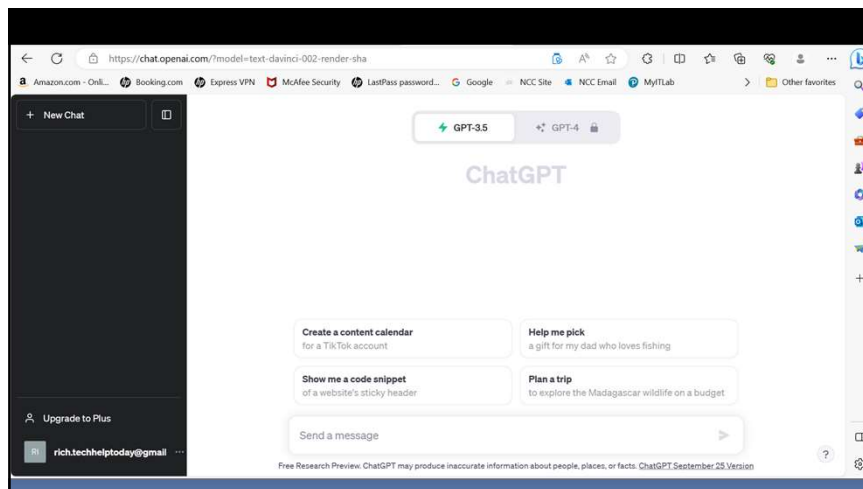
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Bing's Chat Feature

- Up to date info
- Provides source information
- Runs on GPT 4
- Somewhat shorter responses
- Provides sources of information

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How to Use Bing's Chat Feature

- Open the Edge web browser
- Go to bing.com
- Click in upper left: Chat

Microsoft Bing •Chat School Images

Ask me anything…

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WHAT ABOUT THE FUTURE?

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Concerns for the Future

- What about GPT 5 and 6?
- Job losses?
- Will AI fool us?
- Will AI control us?

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Job Losses

Goldman Sachs predicts:

300 million jobs worldwide lost or degraded by AI

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Will AI Fool Us?

- A fake Twitter post causes market crash
  - Showed explosion at the Pentagon
  - Fortunately, quickly dismissed as fake

- "Deep Fakes"

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Is This Real?

https://www.youtube.com/watch?v=oxXpB9pSETo

THIS IS **NOT** MORGAN FREEMAN.

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Can You Clone Yourself?

JOANNA   AI JOANNA
VS.
WSJ | TECH THINGS   7:34

https://www.youtube.com/watch?v=t52Bi-ZUZjA

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Will AI Control Us?

- AI could impersonate our leaders
- Cult leaders could brainwash their followers
- Rogue AI controllers could hijack vital resources

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"Mitigating the risk of extinction from AI should be a global priority alongside other societal-scale risks such as pandemics and nuclear war."

— Signed by hundreds of AI researchers

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"Mitigating the risk of extinction from AI should be a global priority alongside other societal-scale risks such as pandemics and nuclear war."

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What Should We Do?

- Use AI and understand it
- Convince our leaders to control AI
- *While we still can!*

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Thank You!

Rich Malloy

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