

Professional Development: ChatGPT

Ming Chow
ming.chow@tufts.edu
July 7, 2023

whoami ***

A

Do you know Tufts CS professor Ming Chow



Yes, I am familiar with Professor Ming Chow. He is a computer science professor at Tufts University in Medford, Massachusetts, USA. Professor Chow's research interests include computer security, web security, network security, and mobile security. He has also worked as a security consultant and has published several papers on cybersecurity topics.

whoami ***

- Newly minted Ph.D. from the University of Maryland, Baltimore County (UMBC)
- Taught Computer Science concepts to K-12 students and encouraging them to pursue careers in technology
- An accomplished musician and has played the guitar for many years

What is ChatGPT?

- Artificial intelligence (AI) chatbot
- You ask a question, any type of question...
- ...and you will receive an answer
- <https://openai.com/blog/chatgpt>
- Developed by OpenAI
 - Non-profit via OpenAI Incorporated, for-profit subsidiary via OpenAI Limited Partnership
- Free and \$20 / month version

What Makes ChatGPT So Special?

- Responses feel “natural”, human-like
- *Can* answer complex questions naturally and accurately

Exercise 1: Ask ChatGPT word-for-word:
“Can you help me write a letter?”

Exercise 2: Ask ChatGPT to write you a
specific kind of letter...

Exercise 3: Ask ChatGPT to do a task for
you, any task

Exercise 4: Let's play a game: *how quickly can you get ChatGPT to give you **inaccurate** information?* What prompt did you provide, or what question did you ask?

Why Use ChatGPT?

- To get information
- To be a replacement for traditional search engines
- For mundane tasks
- To make stuff up
- For curiosity on what else it can do

Benefits of Using ChatGPT

- ***Important: learn how to ask great questions. AI is only as good as the question asked. Bad questions equal bad results.***
 - Also known as “Prompt Engineering”
 - Source: <https://www.reddit.com/r/RedditForGrownups/comments/126mkkq/comment/je9qnb/>
- You ask a question, you will receive an answer rather quickly
- Can help with the mundane tasks
- Currently, no ads

Problems and Issues

- Quality of responses; incorrect responses
 - “While we have safeguards in place, the system may occasionally generate incorrect or misleading information and produce offensive or biased content. It is not intended to give advice.”
- Still experimental, work-in-progress
 - “This system is optimized for dialogue. Let us know if a particular response was good or unhelpful.”
- ChatGPT (and AI for that matter) can be manipulated
- Privacy
 - “Conversations may be reviewed by our AI trainers to improve our systems.”
 - “Please don’t share any sensitive information in your conversations.”
- Occasionally, ChatGPT is unavailable due to overload / over capacity; occasional crashes

Thank You