Synthetic Newsroom

第六組 報告人：李艷琳、柯德聿、張堂真

Divison

李艷琳 跨院博一：Idea、PPT design(Art Statement&Connection)、Video editing

柯德聿 資工系碩二：Idea、Implementation (Project process programming)

張堂真 資應所博二：Idea、Build the Website

Art Statement | Insight

AI繪圖作品打敗人類繪圖作品

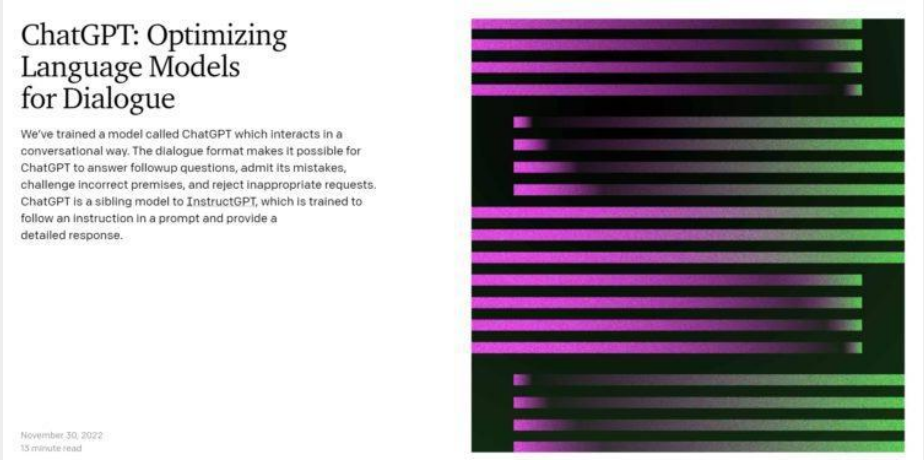
奪美國「Fine Arts Exhibition」美術獎首獎引爭議

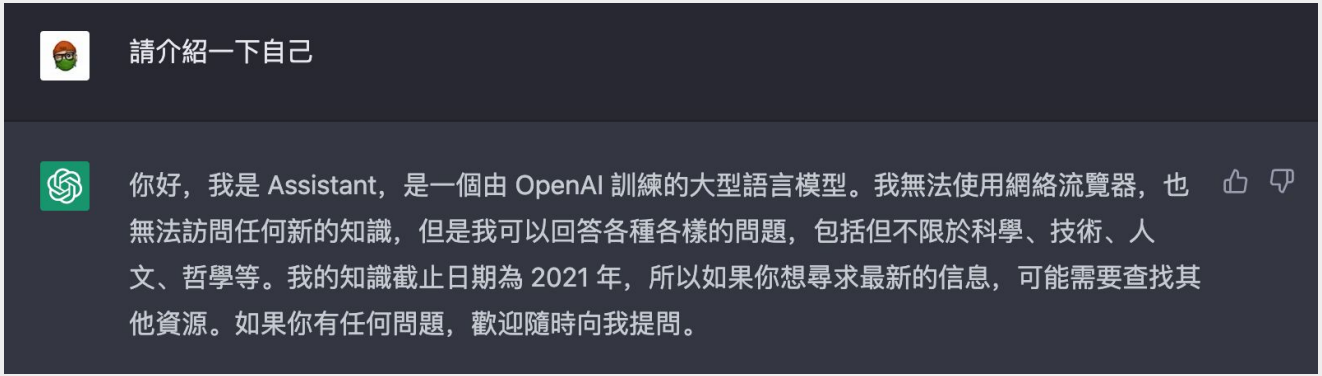
Art Statement | Insight

ChatGPT—— A very powerful AI tool

在ChatGPT 12/15 更新的版本中

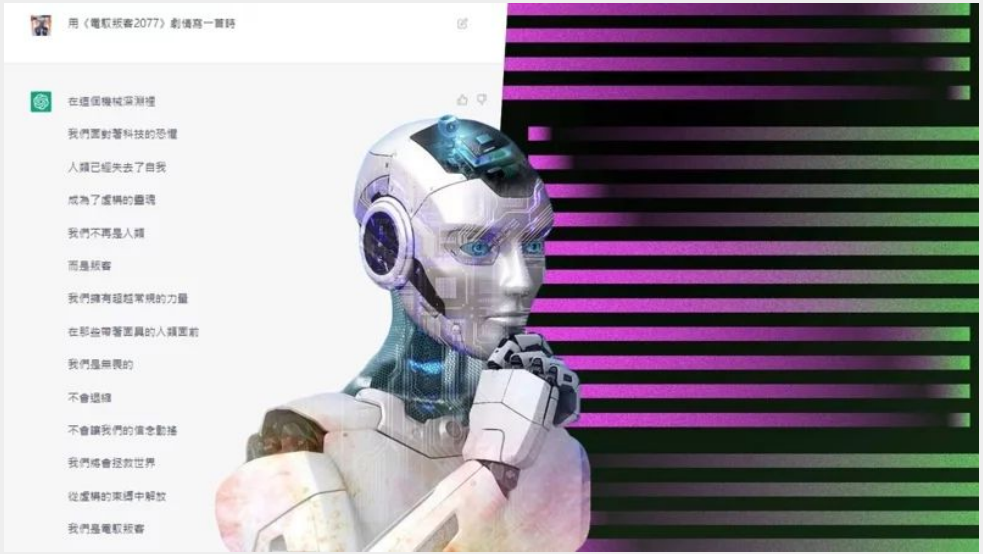
- 提升了總體性能
  - 讓ChatGPT不太可能拒絕回答用戶的提問
- 新增了「對話歷史記錄」
  - 可以重命名對話、繼續對話、刪除對話
- 新增了「每日消息上限」





Art Statement | Insight

AI Generator —— 在便利我們生活的同時也將權利賦予可以訪問Internet的任何人



- **文字**
  OpenAI開放聊天模型ChatGPT，可以寫文章、寫劇本、寫新聞稿、甚至可以寫程式...
- **圖片**
  AI圖片生成 (Midjourney、Stable Diffusion)
- **聲音**
  AI語音生成 (Microsoft Azure、配音神器)

Art Statement | Goal & Future Expectation

- 我們要如何應對「有心人士」用 AI製作假新聞等？
- 如何辨別AI所生成的文字、新聞、圖片的真偽？
- 隨著 AI Generator 技術變得更容易獲得，辨別媒體的真偽變得更具挑戰性。

Art Statement | Idea

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UNCERTAINTY

VOLATILITY

STRATEGY

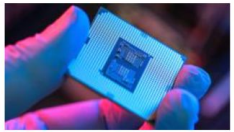
POSITION

CME Group

Capitol riot panel to seek Trump charges - reports

The committee will reportedly seek an unprecedented charge of insurrection against an ex-US president.

3h | US & Canada



How the US-China chip war is playing out

Washington announced some of the broadest export controls on chipmakers in October.

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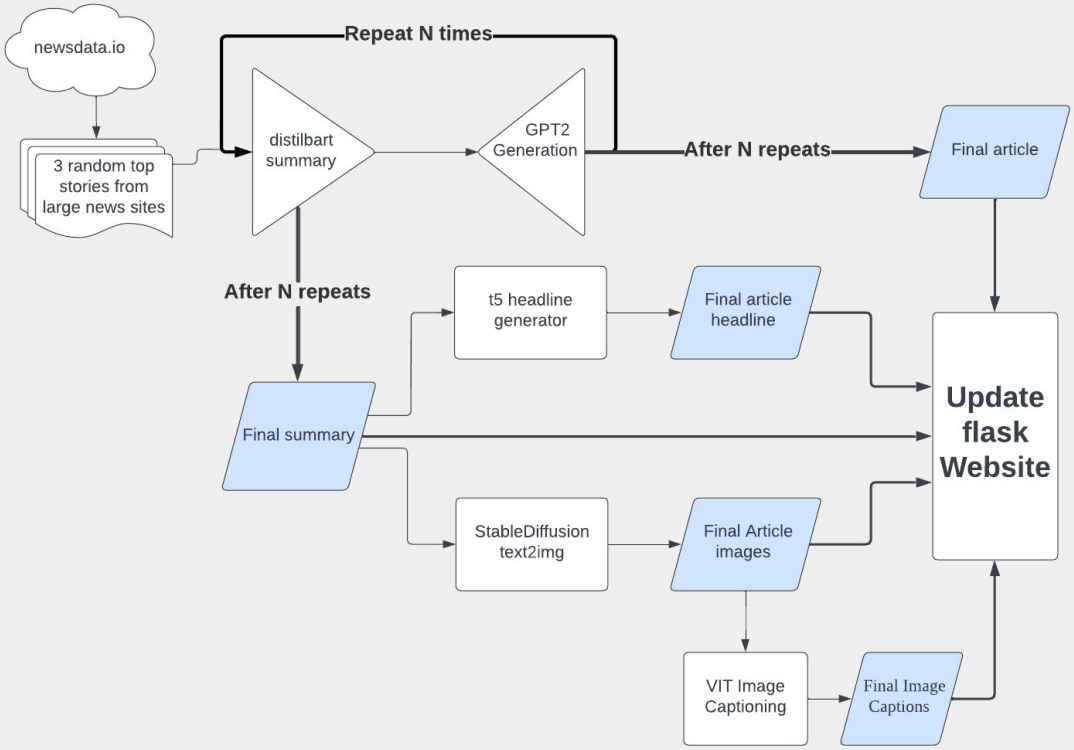
Video

https://www.youtube.com/watch?v=D_W1iaixhrA

Implementation | Project Process

- Access daily news articles through newsdata.io
- Iteratively summerize and expand the content of the article through distilbart and GPT2
    - Information lost in (machine) translation
- Generate a headline with t5 headline generator
- Generate article images using Stable Diffusion text2img
    - Generate article image captions with VIT image captioning



Implementation | Article Example Excerpt

real (excerpt)

Zelenskyy preparing to visit DC, after tour of war's front

WASHINGTON (AP) — Ukrainian President Volodymyr Zelenskyy is preparing to visit Washington on Wednesday, according to three AP sources, in his first known trip outside the country since Russia's invasion began in February.

Two congressional sources and one person familiar with the matter confirmed plans for the visit. They spoke on the condition of anonymity because of the highly sensitive nature of the trip. They said Zelenskyy's visit, while expected, could still be called off at the last minute due to security concerns.

generated (excerpt)

Ukrainian President Volodymyr Zelenskyy is set to visit Washington on Wednesday

Ukrainian President Volodymyr Zelenskyy is preparing to visit Washington on Wednesday, AP sources say. The visit is set to include an address to Congress on Capitol Hill and a meeting with President Joe Biden. It comes as lawmakers are set to vote on a measure prohibiting the military from using drones. White House spokesman Josh Earnest says Obama's plan "includes other proposals that will address issues related to national security, including drones and weapons of mass destruction." Read more

In the past, Trump praised Russia for its support of terrorism and pledged to make the U.S. "on a path to nuclear parity in the event of a nuclear conflict."

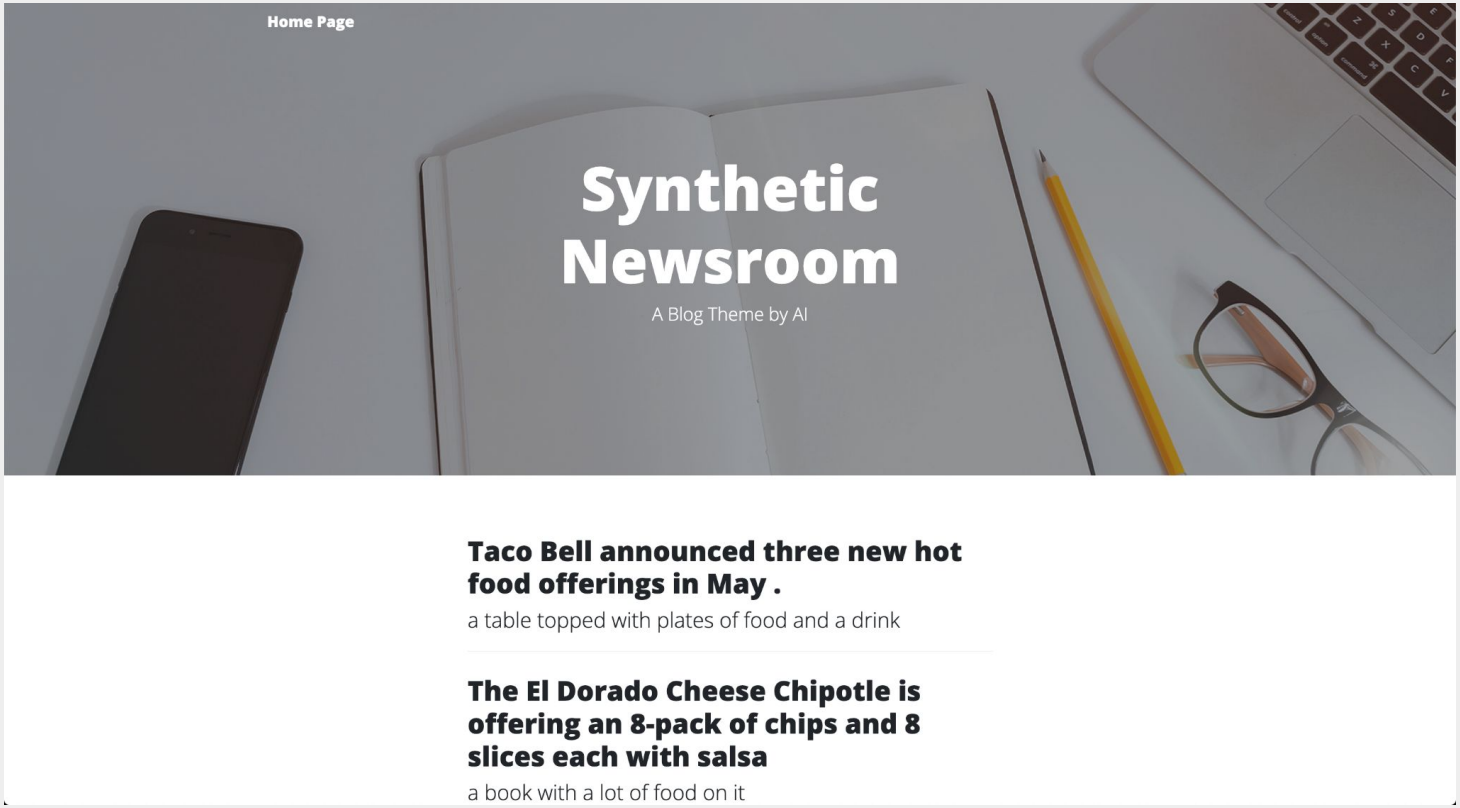
Implementation | Generated Photo

Based on generated title:

A news photo photojournalism **Ukrainian President Volodymyr Zelenskyy is set to visit Washington on Wednesday** *high quality 4k photo*

Generated Caption: *a man sitting in a chair with a book*

Website



http://140.114.77.32:5000/

Connection - 1

中國正在防堵這些 AI 來生成危害政權的內容。

這份規則要求供應者必須要保持「正確的政治方向和正確的輿論導向」。

中國國家互聯網信息辦公室、工業和信息化部、公安部聯合發布《互聯網信息服務深度合成管理規定》，禁止創建沒有明確標記（如浮水印）的 AI 媒體創作規定，並將於 2023年1月10 日生效。

明確指出，像智能對話、合成人聲、人臉生成、沈浸式擬真場景等生成，或者顯著改變訊息內容的服務，都應該進行顯著標識，而且任何組織和個人不得採用技術手段刪除、篡改、隱匿相關標識。

Connection - 2

空間裝置包含老式電視、7 分鐘影片, 430×662 公分

Physical installation including vintage TV with 7′ film, 430×662 cm

2019 年《如果登月失敗》於阿姆斯特丹國際紀錄片電影節展出照片。
In Event of Moon Disaster installation at International Documentary Film Festival Amsterdam, 2019.

1969年7月，世界大部分的人在慶祝「人類的一大步」；五十年後，沒什麼比這更簡單了。「阿波羅十一號」成功讓人類登陸月球，透過重新想像這個具有深遠影響的事件，**《如果登月失敗》展示深偽技術（deepfake）的可能性。**試想，如果當年任務出狀況而太空人無法回家，那會如何？為了這種可能性**尼克森總統準備了應變講稿，但從未發表過，直到現在。**

Burgund與Panetta使用各種能製造假資訊的技術，重新創造這場意外事故的演講。從簡單的「廉價偽造」（cheap fakes）軟體，到複雜的人工智慧增強深偽技術，並使用深度學習技術創造「完整深偽」——意即聲音與影像皆為合成，以此操弄歷史影像，讓NIXON現身發表該演說。

演員路易．D．惠勒使用深度學習技術轉變為理查．尼克森總統。
Actor, Lewis D. WHEELER, is transformed into President Richard NIXON using deep learning techniques.

Comments

- 由於newsdata.io的一些限制，我們只有從中獲取 NPR, The Verge, Salon,和insider四個媒體的資料
  - 之後會自己寫webscraper或是找別的news API
- 如果未來運用在不同的展示方法上，會有不同的呈現方式。
- 對於圖像的AI生成，為了避免看上去一眼假，需要更多時間去調試文字描述。
- 網頁架構更加完善。

Q&A

是否有用過AI生成？（圖像/聲音/文字）

常用AI生成來做什麼？

Q&A

這有AI生成的作品贏得了藝術比賽digital art首獎。作者在投件時有說明是用AI生成此作。你覺得這個作品得獎的合理性與公平性為何？

Art Made by AI Wins Fine Arts Competition

AI-generated artwork won a recent art competition in the US, sparking controversy and fury among artists

by **Belinda Teoh** — September 13, 2022 in **Art**, **Culture**, **Society**, **Tech**

Thanks for listening