Spring 2026

EMIA6500R · CMAA5022 · CSM160021

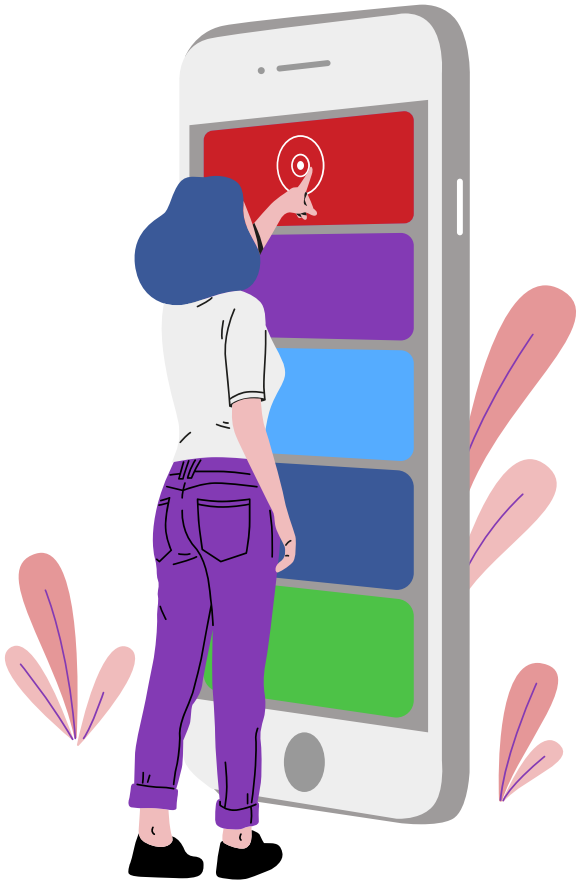
Social Media for Creatives

Lecture 04

The Power of Multimedia in Social Media Platforms

Professor Pan HUI; FRI 15:00 – 18:00

Today's Outline



01

Lecturing

The Power of Multimedia in Social Media Platforms

02

Digital Teachers Lecturing

Multimedia (Text and Audio) in Social Media

03

Guidelines: Groupwork + Participation

Detailed instruction on what to do for groupwork

04

Group Discussion

Next week will be the first presentation…

05

Seminar Talk

Arnold: Statistical Analysis of Social Media Data

Before We Start... Announcement

All Groups: Please submit your chosen Phenomenon and Miro

Group Number	Group Member (* indicates the group leader)	Campus (CWB/GZ/Helsinki)	eMail	Your Phenomenon (by Week 4)	Group Miro Board Link (by Week 4)	Week for Paper Reading Presentation (from Week 5-9)
1	Ka Man (Janet) CHOI	CWB (PhD student in IIP - XR and wearables)	kmchoi546@connect.ust.hk			5
	Meiling WEI	CWB (PhD student in IIP - AI and media communication)	mweiak@connect.ust.hk			
	Yuqi LIANG	GZ (PhD student in CMA)	yliang379@connect.hkust-gz.edu.cn			
	Tianzuo SHI	GZ (PhD student in CMA)	tshi886@connect.hkust-gz.edu.cn			
	Feiyue ZHAO	GZ (PhD student in CMA)	fzhao322@connect.hkust-gz.edu.cn			
2	Ruoshan Yang	GZ	ryang565@connect.hkust-gz.edu.cn			6
	Tianhui LIU	GZ	tliu883@connect.hkust-gz.edu.cn			
	Samar Mahajan	Helsinki	samar.mahajan@helsinki.fi			
3	Yuelu LI	GZ	yli883@connect.hkust-gz.edu.cn			7
	Xinyi Chen	GZ	xchen822@connect.hkust-gz.edu.cn			
	Yulin Yao	GZ	yyao294@connect.hkust-gz.edu.cn			
	Sam Lin	CWB (Ms Financial Maths)	sam.lin@connect.ust.hk			
	Niko Petjakko	Helsinki	niko.petjakko@helsinki.fi			
4	JIAN YANG	GZ (PhD student in CMA -)	jyang000@connect.hkust-gz.edu.cn			8
	YOU ZHOU (YOYO)	GZ (PhD student in CMA - Digital Cultural Heritage)	yzhou785@connect.hkust-gz.edu.cn			
	Zhang Jingyi (Carrie)	CWB (PhD student in IIP - AI and media communication)	jzhangls@connect.ust.hk			
5	Nusratilla Abdullaev	GZ	na800@connect.hkust-gz.edu.cn			9
	FabianWangsa Saputra	GZ	xfws931@connect.hkust-gz.edu.cn			
	Yixuan XIE (Evelyn)	CWB	yxiecx@connect.ust.hk			
	Runqian Yang	GZ	spencery@connect.hkust-gz.edu.cn			

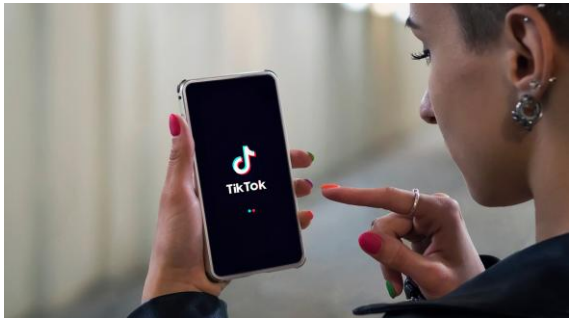
Group 5: new member update, please keep contact!

Group 1: the first presentation starts on 6 March (next week)

Feiyue, Xinyi, Nusratilla: four students in a group is highly recommended. Please tell TAs if you have difficulty following.

Multimedia in Social Media

- In recent years, various **web-based sharing and community services** on social media such as Tiktok and YouTube have made a vast and rapidly growing amount of **multimedia content** available online.
- As a crucial component, **multimedia** enables social media users to create and share more engaging and dynamic content with their audiences.



What is Multimedia?

According to the **Merriam-webster dictionary**, multimedia is:

- *"A technique (such as the combining of sound, video, and text) for expressing ideas (as in communication, entertainment, or art) in which several media are employed."*
- In the context of social media, scholar has proposed the term "***social multimedia***" and defined it as: *"Online sources of multimedia content posted in settings that foster significant individual participation and that promote community curation, discussion and re-use of content."* (Naaman 2010)

How Multimedia Acts on Social Media?

- For **the applications in people's daily lives**, the emergency of multimedia technology and widespread of multimedia content have **transformed the ways people communicate** and **interact with others** on social media platforms.
- In the field of **social media studies**, there is a growing area of research centered on **two avenues** brought by social multimedia:
- **Analyzing community activity** around multimedia resources
- One potential benefit by using multimedia is the opportunity to **aggregate data** or **analyze activities** around individual resources.
- Such analysis can help to **better reason about the multimedia content** shared by users on social media.

By analyzing metadata from multimedia content, like video posts, a study characterizes the cross-platform **mobilization** between YouTube and BitChute videos on Twitter during the 2020 U.S. Election **fraud discussions**. (Childs, WebSci '22)

How Multimedia Acts on Social Media?

- **Deriving and spread more types of metadata**
  - Data could be derived for multiple types of multimedia items or for the entire collection to help in **visualizing or browsing a collection** from a more comprehensive perspective.
  - Beyond individual items, sharing of diverse multimedia content also helps to **aggregate trends** across different social platforms.

Extension: When community activities meets metadata

Community activities can augment and improve metadata about multimedia resources, like generating and displaying **tag suggestions** and augmentation of **personalized content** using social media sources.

02

Digital Teachers Lecturing

Multimedia (Text and Audio) in Social Media

NOAH RAMIREZ

- Gender: Male
- Age: around 30
- Nationality: Swedish American
- Career: digital marketing strategist and social media consultant with over 10 years of experience in the industry

DIANA

- Gender: Female
- Age: 29
- Nationality: German
- One of the two most popular digital teachers in 2024
- Expert in media studies, and the impact of social media on public discourse

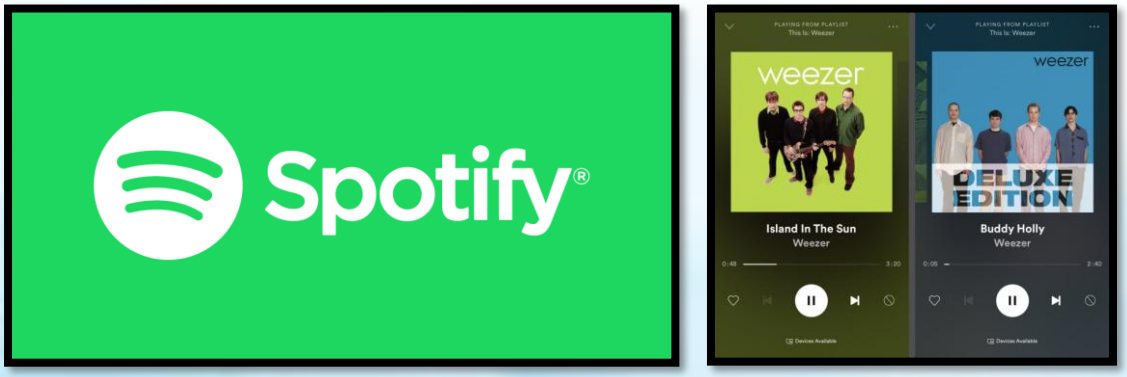
https://christiep-academic.github.io/Social-Media-Course/#schedule → Week 4

Audio in social multimedia

- In multimedia, **audio** refers to the digital format of sound.
- On social media, audio can take many forms, including music, voice message, and podcast.
- Audio is also the most **sensuous** element of multimedia application.
- Audio can **convey emotion** and set the mood of a scene or message.
  - For instance, a study on human behavior has revealed that music is considered as a powerful tool for arousing emotions in human beings.
  - *E.g.*, rock and hiphop music genres evoke happy and sad emotions respectively.
- Audio has also been shown to be a powerful **memory trigger**.
  - Example: Ballerina with Alzheimer's listens to Swan Lake

Audio streaming services – Spotify

- **An audio streaming service** is a type of **streaming media** service that focuses primarily on music, and sometimes other forms of **digital audio** content such as podcasts.
- **Spotify** is one of the **most popular** on-demand audio streaming platforms.
- According to Spotify's 2019 financial report, it operates in **79 countries** with **over 248 million monthly active users** (hence-forth "listeners").



Audio streaming services – Spotify: Some Figures

- There are now more than 250,000 video podcast shows on Spotify—up from 100,000 in 2023.
- More than **170 million users** have watched a video podcast on Spotify.
- More than 70% of users consuming video podcasts watch them in the foreground.
- On Spotify, nearly 1 in 3 U.S. podcast **monthly active users (MAUs)** engage with video, while nearly 1 in 4 global podcast MAUs engage with video. **Globally, the number of video podcast MAUs has grown by 40% year-over-year.**
- The number of creators actively publishing video each month has **grown nearly 70% year-over-year**.
- The largest markets by creators publishing video are **the U.S., Brazil, and Mexico**.

Audio streaming services – Spotify: Innovations

- Improved algorithms for **personalized playlists** like **Discover Weekly and Daily Mix**.
- **Podcast Expansion** by increased focus on exclusive podcasts and original content.
- **Spotify Jam** allows users to create collaborative playlists with friends in real-time.
  - Users can add, remove, and vote on songs together, enhancing the social listening experience.
  - Seamless integration with existing playlists.
  - Real-time updates and notifications when friends add songs.
  - Encourages music discovery and sharing among friends.
  - Ideal for parties, gatherings, and virtual hangouts.

Music Consumption and Globalization

- **Globalization** is a widely researched topic on Spotify.
- Previously, research communities have suggested that, by expanding listeners' access to global music, services like Spotify can accelerate globalization.
- Some researchers reason about globalization by that Spotify can potentially **divert the listenership of locally-produced content to music imported from other countries**. (Verbood 2018).

- However, latest study has revealed **contrary results on musical preference** (Way, ICWSM 2020).
  - Audiences' preferences for local content have been increasing throughout the streaming era.

Music Consumption and Globalization

- By analyzing five and a half years of all streaming data (music trades) from Spotify, the researchers find that
  - Preferences for local content, so called "***home bias***", have in-creased from 2014 through 2019, reversing previously noted trends
  - Analyses validate **a positive correlation** between **artists' affiliation** and **the countries mostly consuming their music,** and that listeners' preferences are influenced by the affiliation.
  - This trend is consistent across different **music genres**, **listeners' ages**, and **listeners' locations**.

- Two important factors are noted for suggesting growing home bias:
  - **Language**: music are more likely to be exchanged between countries with common official languages.
  - **Geographic distance**: music are more likely to be exchanged between countries nearby.

Musical Identity

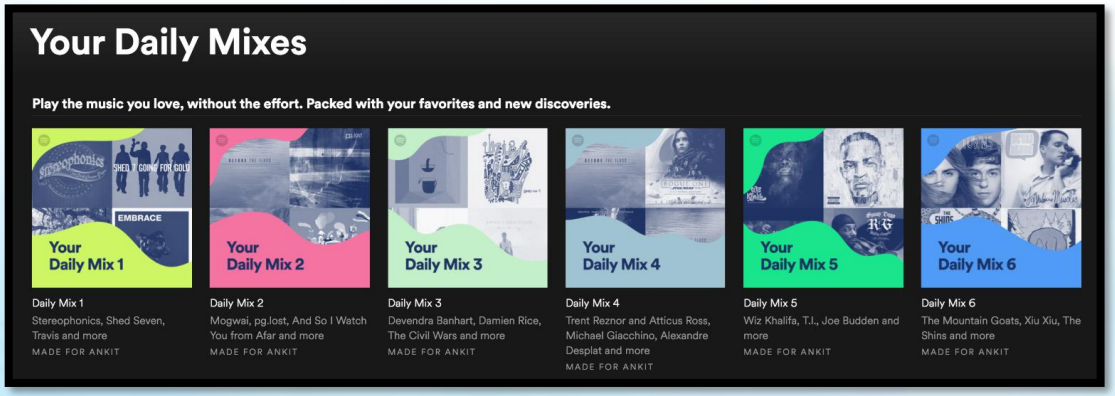
- Another interesting topic related to audio in social media is the **musical identity** of users.
- Phycology literature defines musical identity as:
  - *"The set of **musical tastes or preferences** that people hold, as well as **anything that might modulate those preferences**."* (Hargreaves 2015)

- Users' musical identity can represent an ever-evolving depiction of their cumulative experiences and values.

Musical Identity – Features on Spotify

- **Recommendation engine**: Spotify's recommendation algorithm is influenced by listeners' music preference, which is characterized by their activities.
  E.g., Most-played songs and artists' genres, moods, styles, and era preferences.
- The major products of Spotify recommendation are **personalized playlists**.

  Daily Mix: Spotify will serve up to six personalized playlists based on listeners' favorite songs and related music they might enjoy. The selection of music in daily mix is based on **listeners' habits and preferences**.



Research on Musical Identity

- Various scientific communities have devoted much attention to resolving
  - **What determines a person's musical tastes?**
    - *Mood regulation and management*
    - *Styles and emotions of consumed music*
    - *Lyrics*
  - **What can be inferred or predicted about someone based on their musical tastes?**
    - *Personality*
    - *Potential favored songs*
- One recent study (Way, ICWSM 2019) focuses on the impact on reshaping musical identity by **changes in listeners' location** and finds that
  - **Relocation** has only **a small impact** on individuals' musical tastes, which remain more **similar to those of their past environments**.

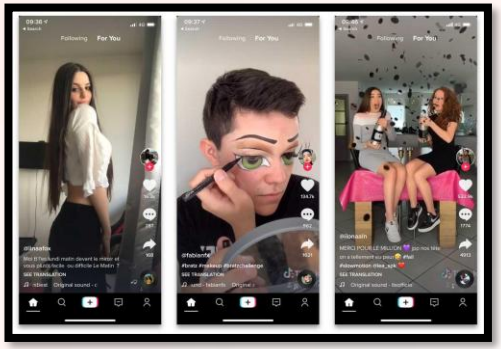
Research on Musical Identity

- This work analyzes the music consumption of Spotify users in the United States between December 2016 and February 2018.
- To assess the changes on locations, the authors define two type of relocation:
  - ***Short-term*** (between-states travel during three observed popular periods)
  - ***Long-term*** (travel to home states in major holidays, e.g., Christmas)
- According to comparative analyses on music consumption patterns between listeners' new and original locations, the authors reveal that …
  - **For short-term effects,** listeners' musical identities are **robust** to changes in a new environment.
  - **For long-term effects,** relocation does appear to **shift individuals' tastes marginally** towards those of their home states.

- In addition, the authors also note the **age gap between a person and the music they consume** indicates that **adolescence**, and likely their environment during these years, shapes their lifelong musical tastes.

Video in Social Multimedia

- Video in multimedia refers to the use of **moving images and audio to convey information, tell stories, and entertain audiences**.
- Video is a **dynamic media** form that combines visual and audio elements to create a more immersive and engaging experience for the viewers.
- There are many types of videos created, broadcasted and shared by users on social media, *e.g.*, **live, vlogs, how-to videos**, etc.



Live Streaming – Twitch

- **Live streaming**, in its current form, enables public broadcast of live audio and video streams alongside a shared chat channel.
- **Twitch** is an American video live streaming service that focuses on video game live streaming, including broadcasts of esports competitions.
- As of January 2023, twitch has **140 million** unique visits each month and **31 million** daily active users. **Over 100 million** people have downloaded the Twitch app.

- On Twitch, streamed content is not always gameplay, many streamers spend significant time **interacting with their viewers** out of game.
- Every Twitch stream has an associated **Internet Relay Chat (IRC)** channel, where viewers can send messages to interact with streamers on chat during the gameplay.

Twitch Streams as Virtual Third Places

- Twitch streams act as **virtual third places**, in which **informal communities emerge**, **socialize**, and **participate** (Hamilton, CHI 2014).
- **Third places** is a concept established by Oldenburg
  - *"public places that host the **regular**, voluntary, informal, and **happily anticipated** gatherings of individuals beyond the realms of home and work"*
- After later study connecting it with **viral communication**, third places refer to **the roles of various media in the formation of online communities**.
- We show how stream functions as third place by three crucial characteristics:
- **Conversation is the main activity**: participants experience this talk as good, lively, humorous, and colorful. In this way, the third place fosters **sociability**.
  - In Twitch stream, the primary form of **participation** that occurs in streams is **playful discussion in the chat**. Discussion is **driven by the events** occurring in the game being streamed.

Twitch Streams as Virtual Third Places

- **The third places have regulars**, people who most frequently visit the place.
  - Regulars take it upon themselves to **engender positive experience**, make the community **attractive to newcomers**, and build the community through **encouraging participation** and open acceptance of new members.
  - In Twitch streams, the **moderators** are most recognized as regulars. In the chat, moderators is not only to keep the discussion in line, but to **engage viewers** and **promote participation and sociability**, which may involve greeting viewers, answering questions, and trying to connect personally with newcomers.

- **The third places have a sense of communities.**
  - In Twitch streams, such a sense is formed by streamers, moderators, and viewers spending time together and interacting with each others to **fulfill emotional needs**.
  - In addition, such a sense would also encourage community to exhibit a **shared social atmosphere** instituted by the streamer and regulars and form **emotional connections** among members.

Twitch Streams as Virtual Third Places

- **The third place contains hot & cool media,** where cool (hot) media refers to low (high) fidelity and high (low) participation. **Cool media** afford **participation**. **Hot media** afford **spectating**.
  - In Twitch streams, live streaming is a **hybrid form**, conjoining game graphics (high fidelity), live webcam video (medium fidelity), and chat (low fidelity).
  - Participation is most directly afforded by the **low fidelity medium of IRC chat**, making streams open and accessible, empowering newcomers.
  - **Hot live video**, based on relatively common computer graphics and networking, powerfully facilitates sharing rich experiences of play. It gives participants opportunities to engage more deeply.

Figure. Twitch streams enable streamers to broadcast **high-fidelity video** of gameplay and real-life. Viewers simultaneously communicate through IRC chat channel (right).

Live Stream: China vs. North America

- In China, live streaming has become a **massive phenomenon** in recent years, with millions of people regularly tuning in to watch live broadcasts from video game streams to chatting.
- According to **Statista**, by June 2022, there has been approximately **727.9 million** live streaming users in China, representing a penetration rate of **68.1 percent** among internet users.
- Chinese live streams **differ** greatly in content, style, and form compared to those in North America and Europe.
- A previous study conducts a mixed methods exploration that included an online survey (N = 527) and interviews (N = 14) with regular users in China (Lu, CHI 2018). The results depicts **the difference on popular topics and activities** of live streams between **China** and **North America**.

Next, we discuss about several interesting aspects for such difference.

Live Stream: China vs. North America

- **Sharing Personal Experiences**
  - **Conversational streams** is the most popular with Chinese respondents.
  - Different from that conversations are centered around playing video games in North American streams, Chinese conversational streams more emphasize on **engaging in the conversation with viewers**.
  - Most such streams focus on meaningful, serious topics, such as dealing with intimate relationship, work-life balance, career planning and development.
- **Videogaming**
  - The motivations for watching video-game play are similar to North America, i.e., to learn game play skills and strategies.
  - However, Chinese game streamers sometimes also stream **other activities**, such as singing performances or outdoor activities, thereby raising their engagement with the stream.

Live Stream: China vs. North America

- **E-commerce**
  - Although akin to North American infomercials, **e-commerce** is a major type of Chinese streams for selling products.
  - When asked if they would like to try the goods recommended by the streamer, higher average likelihoods on participants' responses indicates that some viewers are **influenced by the streams** and may **trust the streamer's recommendations**.
  - However, compared to North American infomercials, e-commerce streams are **more interactive**, i.e., ask the streamer to show different perspectives of the product and ask questions about the product.

Extension: One latest study has shown that e-commerce streams significantly empowers rural women. Interviewees agree that streams help to gain confidence, for the opportunities to practice how to fluently express their ideas to urban consumers (Tang, CHI 2022).

Animation in social multimedia

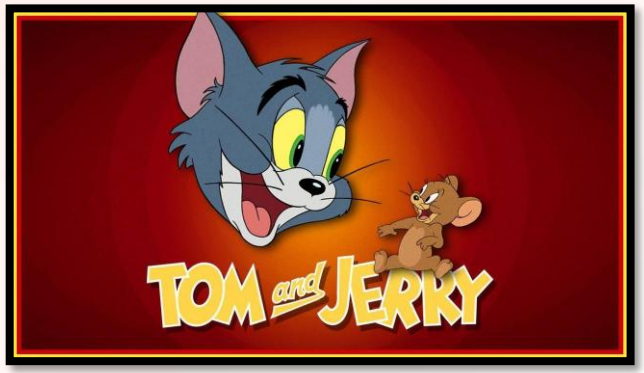
- **Animation** is a media type where images or objects are manipulated to be displayed as moving ones.
- Computer animation refers to the animation created by **computer-generated imagery (CGI)**.
- Computer animation can be very detailed **3D animation**, while **2D animation** (which may have the look of traditional animation) can be used for stylistic reasons, low bandwidth, or faster real-time renderings.


Anime

- **Anime** is a style of animation that originated in **Japan**, and is known for its distinctive **visual style**, which often features characters with large eyes and colorful hair, as well as its complex and diverse storylines.
- Anime is typically produced for a **Japanese audience**, and often explores themes and concepts that are **unique to Japanese culture**.
- Anime has become a significant part of Japanese culture and influenced the entertainment industry worldwide.

Cartoon

- **Cartoon**, on the other hand, is a form of animation that can be produced **in any country** and are typically aimed at a **younger audience**.
- Cartoons often have **simpler storylines and visuals** compared to anime, and often employ **humor** and **slapstick comedy** as a primary form of **entertainment**.
- **Cartoon characters** are often **exaggerated** and **stylized**, with distinctive physical features that are **easily recognizable**.



Animated GIFs

- Next, we will discuss about the animated GIFs and related research.
- An **animated GIF** is a type of image file that contains multiple frames or images that are played back in sequence to create a short, looping animation.
- Unlike traditional videos, animated GIFs do not have sound, and they typically feature simple animations or short clips that are meant to be **viewed quickly** and **easily shared on the internet**.
- Animated GIFs are playing an increasingly important role in social media, delivering news, storytelling, and emotional expression.

- However, by conducting interviews with social media users (N=15), related literature have pointed out several **application practices and challenges** for animated GIFs on **social media communication**, from three major dimensions – **the appeal of animated GIFs, technical functionality, and context** (Jinag, CSCW 2018).

Practice & Challenge for Animated GIFs on Communication

The appeal of animated GIFs: participants described various ways to use animated GIFs.

- GIFs work as a way to enhance users' interpersonal communication by conveying emotions.
- GIFs could make messages humorous or eye-catching.
- GIFs serve as communication tactics to initiate and maintain conversations, similar to those used in face-to-face communication.
- Users turn to GIFs when they want their messages to be engaging or they want to signal effort in the conversation.

The very first GIF was of a clip art airplane soaring through a pixelated sky.

Practice & Challenge for Animated GIFs on Communication

- **Technical Functionality:** technical overhead associated with GIF use can cause challenges to the presentation of GIFs, which frustrated participants.
- **Platform GIF Support:** participants experienced frustration on platforms that lack adequate GIF support, including difficulty or even inability to use GIFs.
- **Built-In GIF Search Engines:** some platforms lack search engines for exploring GIFs. Even when platforms incorporated GIF search engines, the results are low quality.

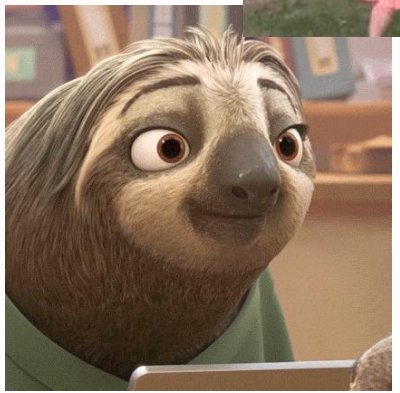
In addition, participants' frustration on the **lack of supportive techniques** to **find "right" GIFs** is highlighted by **stress from replying instant messages**.

- Users can theoretically take the time to find the perfect GIF, but in **high-tempo instant messaging** where GIFs are often used, taking the time may not be a feasible option.

Practice & Challenge for Animated GIFs on Communication

Context has a significant impact on the *acceptance* of GIFs.

- Context reflects various kinds of **common ground**, from personal to communal, and impacts not only what GIFs to use and how GIFs are interpreted by the recipient, but also whether to use GIFs at all.
- **Source Material** is the media where the content of GIF originates, which impacts how people interpret that GIF. Context of source material reflects communication partners' communal common ground, particularly shared knowledge of the source material, e.g., pop cultures.
- The context of the interpersonal relationship between communication partners shapes how people use GIFs. Miscommunication under this type of context also tend to happen when their communication partners did not understand the meanings of **GIFs**.



Practice & Challenge for Animated GIFs on Communication

- **Social norms and individual perceptions can influence whether or not people are going to use certain GIFs in their communications.**
- During communication, many people would use GIFs while taking into consideration their **personal common ground** and **whether the recipient would understand their intended meaning**. However, miscommunication could occur if the recipient was unfamiliar with the GIF's meaning.
  - ※ Media norms consist of three concepts: what GIFs are, how they are used, and why they are a legitimate form of communication.
- Perception of a **platform culture** can influence the choice of **whether to use GIFs on that platform**. Specifically, participants consider **social practices and culture** that they observe on the platform and compare them to their **own communication practices**.
  - ※ For instance, one participant uses GIFs the most on Twitter for that it is good for the fast-paced conversations common on that platform. However, some participants chose not to use GIFs on Twitter also because of **communication style**.

Multimedia System on Social Media

- Multimedia requires **a computer system** that can create, import, integrate, store, retrieve, edit, and delete two or more types of media materials in digital form (Bailey, 1990). Such a computer system is called **multimedia system**.

- A multimedia system typically includes **several components** that work together to deliver a rich multimedia experience on social media. The key components of a multimedia system are:
  - **Devices for I/O, processing, and storage**

    To allow users to create and consume multimedia content on social media, multimedia systems require devices to be capable of high-quality media, which often requires significant loading & processing power, storage, and a high-resolution display (Furht 1994; Nahrstedt, 2005).

Multimedia System on Social Media

The **device demands** of multimedia systems majorly fall into…

- **I/O devices**: these are devices that can load users' input to the systems and display multimedia content to users.

- **High-speed processors**: social media platforms need significant processing power to present multimedia content smoothly and without lag. High-speed processors are crucial to handle demanding request from social media applications.

- **Sufficient storage**: multimedia files shared on social media can sometimes be in a large size such as photos and videos. Multimedia systems should contain devices with sufficient storage capacity to store these files.

Multimedia System on Social Media: Communication networks

- On social media, users usually share and access multimedia content across different devices and locations. Therefore, a **communication networks** connecting different social platforms is an essential component of multimedia system.

- **For users**, a communication network allows them to **access** to social media platforms and **exchange** multimedia content with others in real-time.

- **For social media platforms**, a communication network is the **foundation for remote services and collaborative development**, *e.g., cloud drive for storing multimedia files and social platform API (discussed in previous tutorial!) for third-party developers*.

Multimedia System on Social Media: User Interface

- The user interface refers to the **visual and interactive elements of a multimedia system**, e.g., navigation menu, creation tools, and search functionality (Fraternali 1999).

- User interface provides social media users access to **interaction** with and **manipulation** on multimedia content on platforms.

- The design of user interface also plays am important role on **users' experience** on multimedia software.
  - *A badly designed user interface can doom a software product for its terrible using experience, despite its complex functionality or the power of its technology* (Badre 2002).

Multimedia System on Social Media

- On social media, **multimedia applications** refer to the various software tools and applications built on multimedia systems, which serve for users to effectively interact with multimedia content.

- **Why multimedia application is effective?**
  - As research and publishing company Computer Technology Research (CTR) Corporation reports, people retain knowledge only

Multimedia System on Social Media

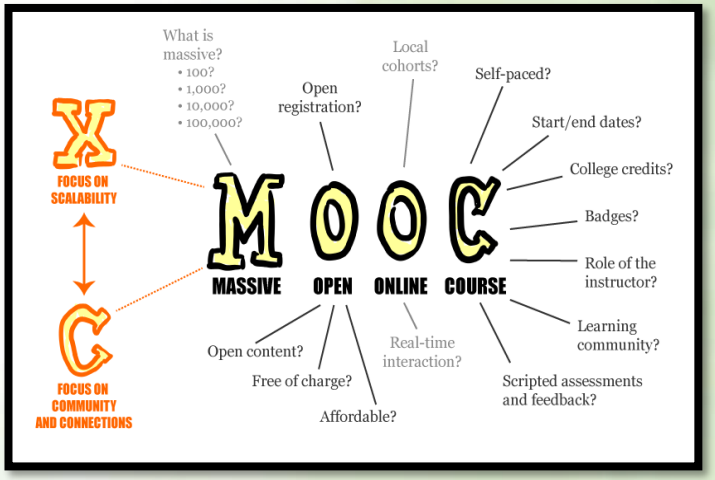
- Multimedia applications usually combine **at least one discrete** (text and graphics) and **one continuous media type** (audio, video, and animation).
- Thus, multimedia applications are generally **flow-based applications**, since the continuous media type processed in these applications are **continuous streams**, e.g., video and audio streams. (Nahrstedt, 2005)

- **Practice of multimedia applications**
  - The rapid emergence of **multimedia-based** (including Web-based) information systems in recent years presents a unique potential for applications in both research and industry.
  - Multimedia finds its application in various areas, e.g., **education** and **creative communities**.

Multimedia Applications on Education

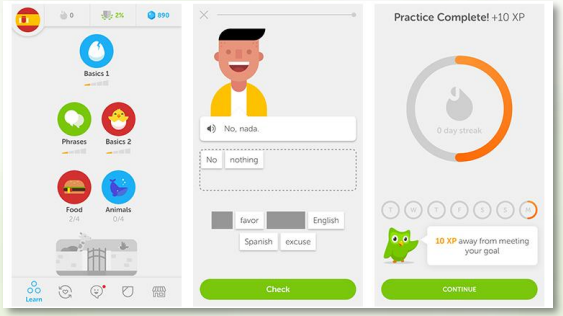
Education: multimedia applications have revolutionized the field of education in recent years.

- Diverse types of multimedia content provide students with engaging and interactive learning experiences.
- In language learning, multimedia shows significant influence on learners' experience and efficiency.
- An experiment has depicted how multimedia content changes language learners' experience on mobile devices from four affordances - **sensory**, **physical**, **cognitive**, and **functional** (Uther 2016) .



Multimedia Applications – Duolingo

- A good practice of multimedia application in e-learning industry is **Duolingo**.
- Duolingo is an American educational technology company launched at the end of 2009, which produces learning apps and provides language certification.
- Duolingo is featured by its **gamified approach** to language learning.
- Duolingo's gamified approach incorporates a variety of multimedia elements, such as animation for quizzes' feedback, budge icons as rewards, and text reports for progress tracking, to keep students motivated and engaged.



Multimedia Applications on Creative Communities

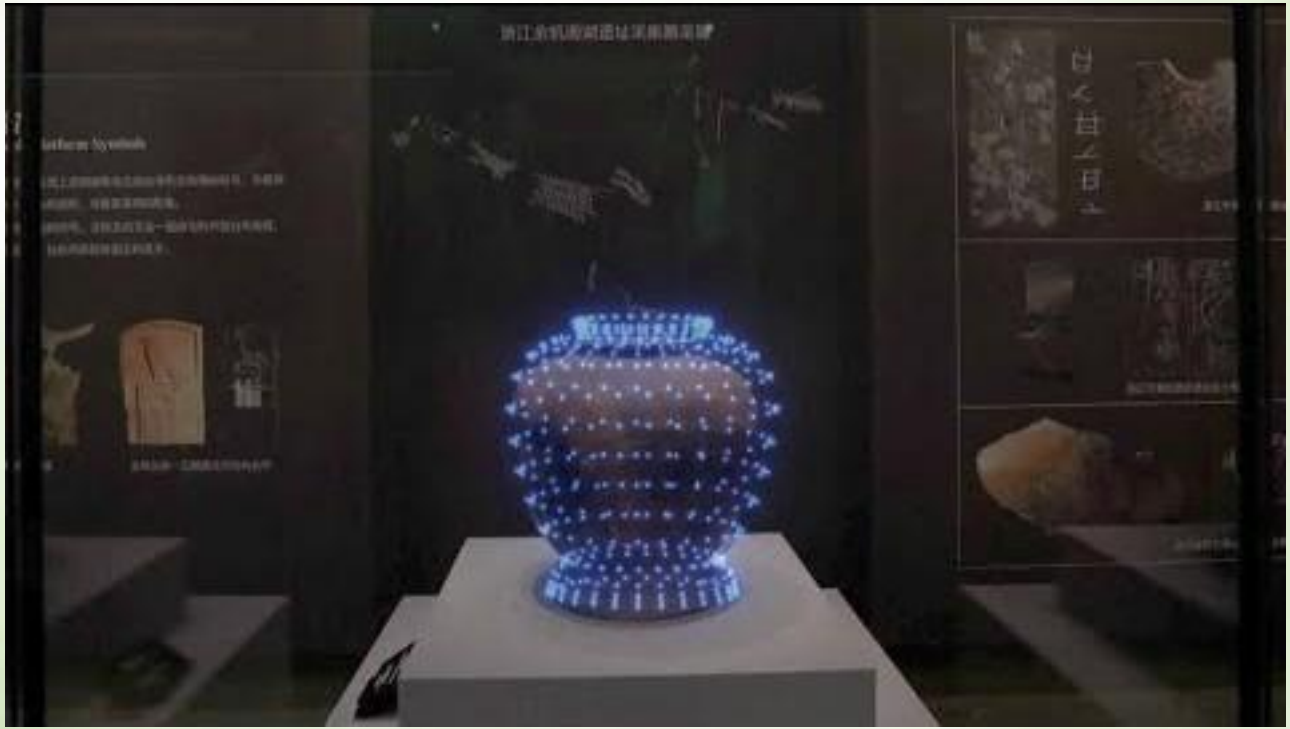
- **Creative communities**: multimedia applications provide new ways for artists and designers to **exhibit** their work, **collaborate** with others, and **explore** innovative new forms of expression.

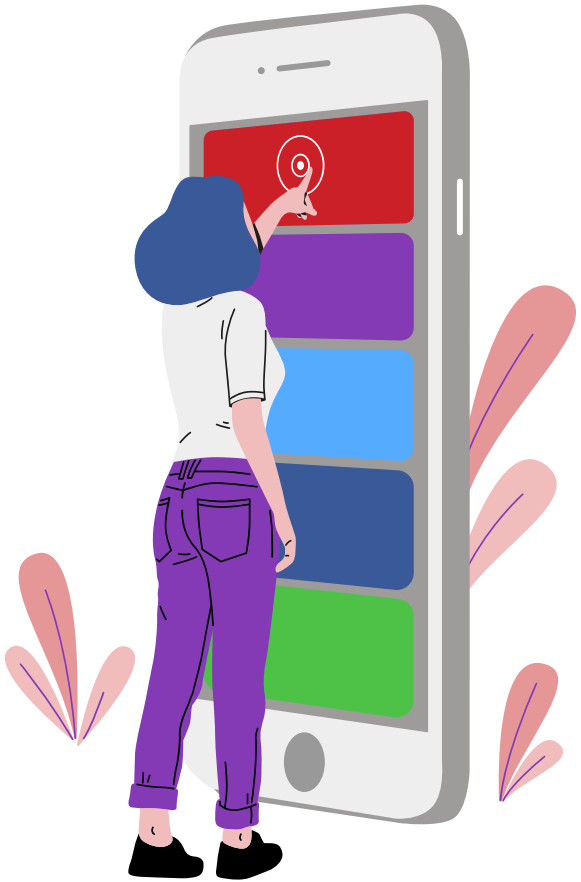
- In the field of art learning, multimedia technologies act on **redefining creativity** in the art classroom, by allowing for new and creative pedagogical practices.
- A study by Hashimi on 42 art students has shown that multimedia-based classroom encourages students' creativity.
- Teachers' responses also suggest that combining multimedia technologies is a more **efficient** educating strategies to **cultivate creativity** in art and design courses (Hashimi 2019).

Multimedia Applications - VR Exhibits

- A new practice of multimedia applications in the art and design industry is **Virtual reality (VR) exhibits**.
- In recent years, immersive technologies have enabled museums and galleries to create immersive exhibits that transport visitors to another world.
- In 2020, the **Louvre Museum** in Paris created a VR exhibit that allows visitors to explore the **Mona Lisa** and other masterpieces up close.

Multimedia Applications - VR Exhibits





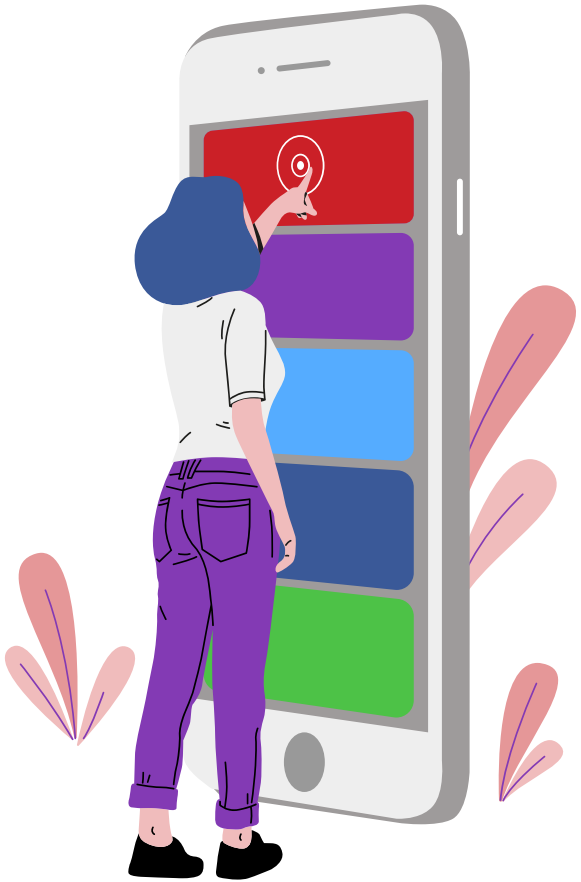
03

Guidelines: Groupwork + Participation

Detailed instruction on what to do for groupwork

In each of the following weeks, you will be instructed to…

- A 15-minutes individual brainstorming session with notes on your group Miro board
- A 20-minutes discussion time in your group. You may want to look for more information on the website
- A 15-minutes for updating your group Miro board with the header, a paragraph description, initial links and examples from the three places, list your findings…. (be creative!)
- A 5-10 minutes for answering a short survey that counts your participation score



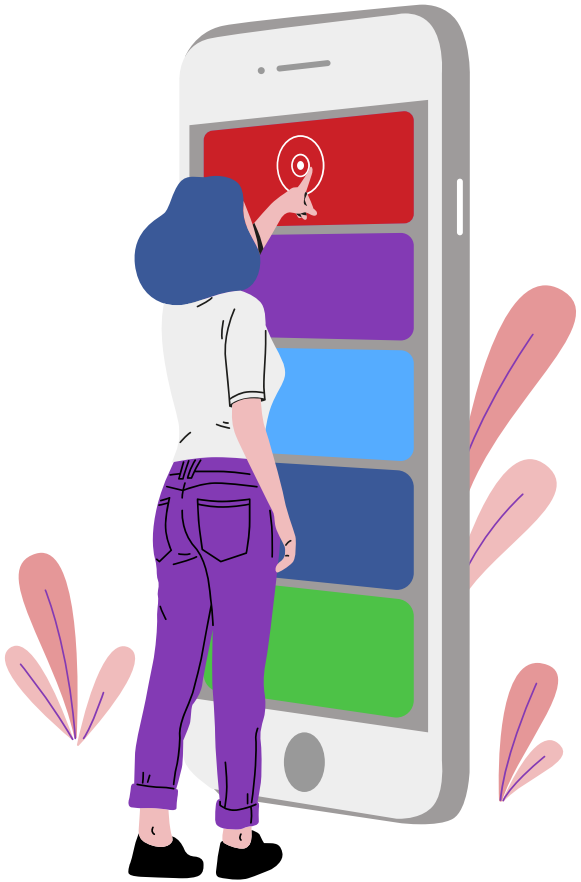
03

Guidelines: Groupwork + Participation

Detailed instruction on what to do for groupwork

Before VR session, students can think of the following questions **individually**. Focus on media formats in your phenomenon. Add to Miro:

- What formats dominate (video, image, text, audio, mixed)?
- Why these formats? How do formats differ between HK, GZ, and Helsinki?
- One example showing format choices.



04

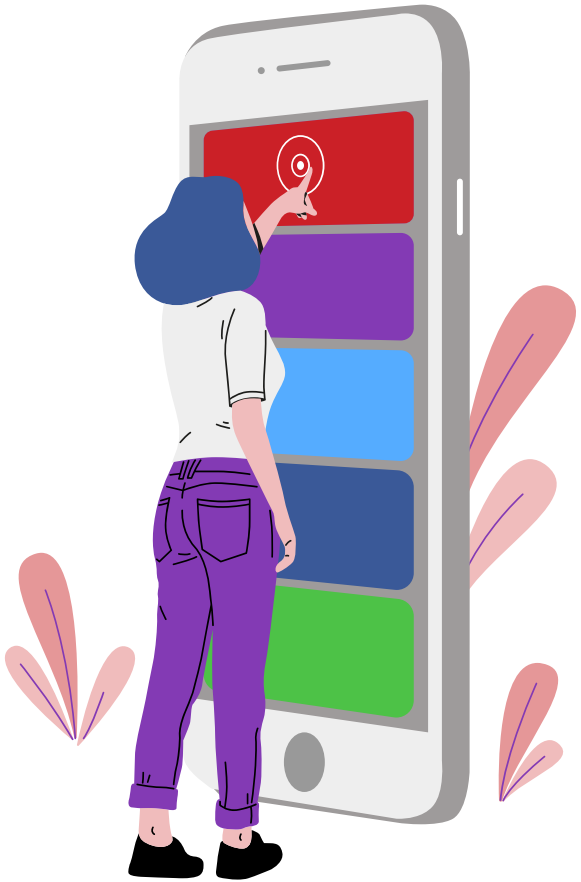
Group Discussion

During VR

During VR session, share observations. Discuss:

- Why do these formats work for this phenomenon?
- How do platform affordances shape format choices?
- Does multimedia work differently across contexts?
- What would change if the format changed?
- Identify one insight about format power, one format difference across contexts.

Today’s Outline



04

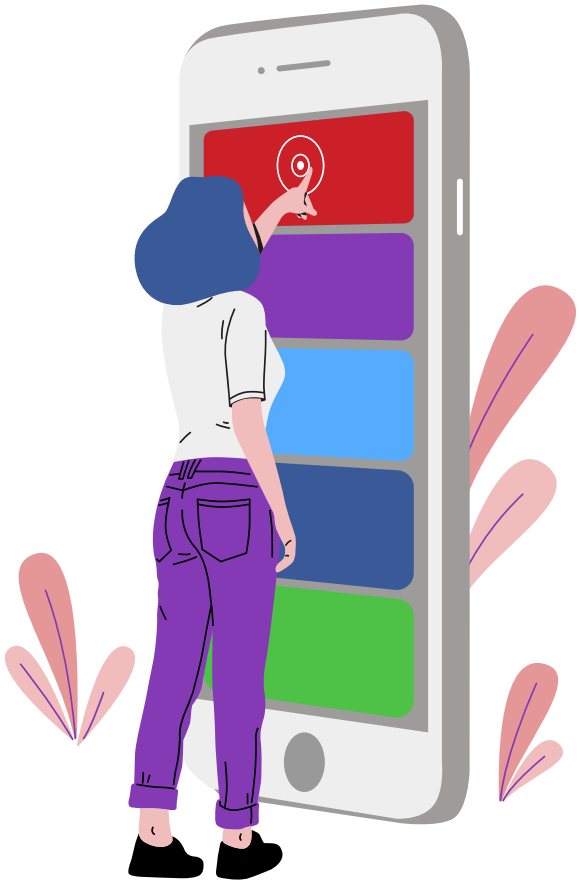
Group Discussion

After VR

After VR session, please:

- Create "Week 4: Multimedia" section on Miro and write…
- key insight about formats, how platform shapes choices, cross-cultural format differences, examples, connections to previous weeks.
- Individual reflection: What format choice surprised you? How does format shape meaning?

Today’s Outline



04

Group Discussion

Survey (counts for participation score)

Reminder AGAIN

All Groups: Please submit your chosen Phenomenon and Miro

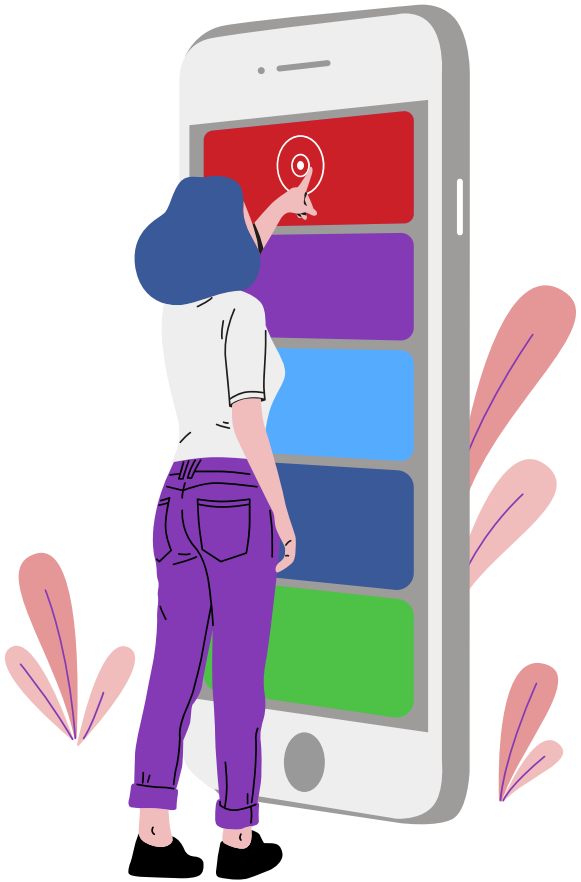
Group Number	Group Member (* indicates the group leader)	Campus (CWB/GZ/Helsinki)	eMail	Your Phenomenon (by Week 4)	Group Miro Board Link (by Week 4)	Week for Paper Reading Presentation (from Week 5-9)
1	Ka Man (Janet) CHOI	CWB (PhD student in IIP - XR and wearables)	kmchoi546@connect.ust.hk			5
	Meiling WEI	CWB (PhD student in IIP - AI and media communication)	mweiak@connect.ust.hk			
	Yuqi LIANG	GZ (PhD student in CMA)	yliang379@connect.hkust-gz.edu.cn			
	Tianzuo SHI	GZ (PhD student in CMA)	tshi886@connect.hkust-gz.edu.cn			
	Feiyue ZHAO	GZ (PhD student in CMA)	fzhao322@connect.hkust-gz.edu.cn			
2	Ruoshan Yang	GZ	ryang565@connect.hkust-gz.edu.cn			6
	Tianhui LIU	GZ	tliu883@connect.hkust-gz.edu.cn			
	Samar Mahajan	Helsinki	samar.mahajan@helsinki.fi			
3	Yuelu LI	GZ	yli883@connect.hkust-gz.edu.cn			7
	Xinyi Chen	GZ	xchen822@connect.hkust-gz.edu.cn			
	Yulin Yao	GZ	yyao294@connect.hkust-gz.edu.cn			
	Sam Lin	CWB (Ms Financial Maths)	sam.lin@connect.ust.hk			
	Niko Petjakko	Helsinki	niko.petjakko@helsinki.fi			
4	JIAN YANG	GZ (PhD student in CMA -)	jyang000@connect.hkust-gz.edu.cn			8
	YOU ZHOU (YOYO)	GZ (PhD student in CMA - Digital Cultural Heritage)	yzhou785@connect.hkust-gz.edu.cn			
	Zhang Jingyi (Carrie)	CWB (PhD student in IIP - AI and media communication)	jzhangls@connect.ust.hk			
5	Nusratilla Abdullaev	GZ	na800@connect.hkust-gz.edu.cn			9
	FabianWangsa Saputra	GZ	xfws931@connect.hkust-gz.edu.cn			
	Yixuan XIE (Evelyn)	CWB	yxiecx@connect.ust.hk			
	Runqian Yang	GZ	spencery@connect.hkust-gz.edu.cn			

Group 5: new member update, please keep contact!

Group 1: the first presentation starts on 6 March (next week)

Feiyue, Xinyi, Nusratilla: four students in a group is highly recommended. Please tell TAs if you have difficulty following.

Today’s Outline



05

Seminar Talk

Arnold: Statistical Analysis of Social Media Data