

INFO 492 B MUSIC **RECORDING AND DISTRIBUTION IN** THE ERA OF **GENERATIVE** MUSIC Capstone Gala Archive

ABOUT THE CLASS

Project Overview: Experiment on the intersection of music recording and artificial intelligence.

Research Focus: Distribution of music as an information medium and its purposes beyond entertainment.

Unique Aspect: Included Large Language Models (LLMs) as part of musical ensembles; where 'AI' was a member of each team's 'band'.

Outcome: Each team produced three-song EPs and released them on Spotify and other streaming services.

STUDENT TEAM: STRAWBERRY JAM

Members: Sloane Shea, Kassy Chaput, Lily Dong.

Three song EP sample:

https://open.spotify.com/album/792oJh3FsjBN1uNYFP6FTr?si=DISth9DITo qJSDazjrlxjQ

Final presentation:

https://docs.google.com/presentation/d/1MIBCtem09aY3h-LGVidZXUMQX d0tBSuYtxVpbvEZgfM/edit#slide=id.p

STUDENT TEAM: COUGHING UP PHLEGM

Members: Jake Harper, Josh Shin, Mike Deng, Shammu Meyyappan.

Three song EP sample:

https://open.spotify.com/album/5xGPljgGJScJqNQkDctoJK

Final presentation:

https://docs.google.com/presentation/d/10RH48FWNqq4iZPf2Zq5DqhDW0 hH0jLc4cFfRhBhqarM/edit#slide=id.p

STUDENT TEAM: WEATHER REPORT

Members: Zoey Zhao, Siyu Lin, Lydia Lin, Kexuan Feng, Brian Chien

Three song EP sample:

https://open.spotify.com/album/0rowPUFQ4pxy8qFTvj3uT3

Final presentation:

https://docs.google.com/presentation/d/1nlbFBV2MtBb5C2Nb2XYsAs_-X9B 3YSW44BL2AD3pMO4/edit#slide=id.p

STUDENT TEAM: HUSKY BEAT

Members: Xinyu Chang, Maria Ma, Luna Liu, Danny Dai, Kunyang Li

Three song EP sample:

https://open.spotify.com/album/3Yb23rse2fND3vxUI5LmI8

Final presentation:

https://docs.google.com/presentation/d/1iuKSxa703eX0y4a_dEtzs9pWdM1 s0osg2ReSco-F5Ek/edit#slide=id.gcec4d27072_0_0 Harmonizing Al and **Human Creativity in Music Production: An Exploration of Emotive Impact**



HuskyBEAT

ABOUT US







Xinyu (Creasa) Chang

MAJOR

Hi, I am a senior majoring in INFORMATICS.

FAVORITE MUSIC GENRE

Hip pop; R&B



ROLE

Music Composition; Vocal; Data Scientist

FAVORITE SINGER

Frank Ocean; Keshi





MAJOR

Finance & Informatics

FAVORITE MUSIC GENRE

Pop

Luna Liu



ROLE

Music Composition; Vocal

FAVORITE SINGER

JVKE D.O.



Yuzhuo(Maria) Ma



ROLE

Guitar; Piano; Vocal

FAVORITE SINGER

Muni long; SZA; Kaash Paige; Jenevieve



MAJOR

TROG ASEMINAL

Hi, I am a senior majoring in INFORMATICS.

FAVORITE MUSIC GENRE

R&B; Pop





ROLE

Music Composition; Violin

FAVORITE SINGER

> Jay Chou; BaekHyun



MAJOR

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Hi, I am a senior majoring in INFORMATICS.

FAVORITE MUSIC GENRE

R&B



MAJOR

Hi, I am a senior majoring in INFORMATICS and minoring in Math.

FAVORITE MUSIC GENRE

Rock; Jazz

Danny Yue



ROLE

Music Editing; Vocal; Piano

FAVORITE SINGER(s)

> Jay Zhou; Coldplay





Ensemble's Thesis







Ensemble's Thesis



Ensemble keywords:

Creativity (Xinyu), **Human Involvement** (Kunyang), **Emotional Information** (Luna), **Distinctiveness**(Danny), **Training Data Fairness** (Maria)

" The use of AI in the creative process of music production will diminish its capacity to deliver emotive information."



Ensemble's Thesis





Variable

Different degrees of creative Al use in each song.



Constants

R&B genre; collaborative recording with AI; constant creation periods



Method

Semi-structured survey rating emotional responses for each song.



Conclusion

Explore AI's impact on conveying mood in music



Abstract



" This study investigates the thesis that the use of artificial intelligence (AI) in the creative process of music production diminishes its capacity to deliver emotive information. Through detailed analysis of three songs with varied levels of AI involvement and employing face-to-face interviews, we critically assess how AI's integration influences the emotional depth and complexity of music. Our findings indicate AI as a structural tool, emphasizing human creativity's vital role in emotional resonance. Advocating for balanced AI-human collaboration in music creation, we highlight the indispensable human element in emotional articulation, providing a refined view on AI's role in creative industries."

AUDIO ENGINEEA Ensemble PIER PORTFOLIO AUDIO Pre – Production Plan



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Musical Ensemble Plan with Al Integration + Lab Schedule

- Miro Link: https://miro.com/app/board/uXjVN6UutcM=/#tpicker-content
- Song #1: "BEGINNING IN HUSKY HUES" (R&B)
 - Al: 80% (Melody, Chords, Initial Lyrics) \bullet
 - Human: 20% (Vocals, Instruments, Refinement)
 - Dates: Pre-prod (01/12 01/20), Rehearsals (01/20 01/25), Recording + Editing(01/25 02/01), Listening Session(02/01 - 02/02)
- Song #2: "CATCH 24" (Hiphop)
 - AI: 50% (Melody Development, Song Structure)
 - Human: 50% (Vocals, Instruments, Lyrics) \bullet
 - Dates: Pre-prod (02/02 02/10), Rehearsals (02/10 02/13), Recording + Editing (02/13 02/15), Listening Session(02/15 - 02/16)ATOLIO AUDIO ENGI
- Song #3: "TO BE" (Hiphop)
 - Al: 20% (Lyrics Refinement)

 Human: 80% (Composition, Vocals, Instruments)
Dates: Pre-prod (02/16 - 02/23), Rehearsals (02/23 - 02/26), Recording (02/26 - 02/28), Listening Session(02/28 - 03/01) ICIN

OCONTER PORTFOL Musical Ensemble Song USIV-BET Sketches







Musical ensemble song sketches for the first song



EER PORTE **Miro Link:** https://miro.com/app/board/uXjVN6Uu PORTFOLIO AUDIO tcM=/#tpicker-content

Brainstorm from following perspectives:

- Inspiration
 - What influences your 0 songwriting?
- **Music Genre**
 - Ideas of music styles 0
- Storytelling/Narrative
 - **Techniques for Expressing** 0 **Emotion Through Music**
- Instruments
 - **Ideas played on instruments** Ο
- Words
 - Ideas formed into words 0



Song Sketches Ideas

Inspiration:

- Reflections on university life
- Emotional journey
- Experiences

Music genre:

• R&B

- Hip-hop
- Soothing and slow-paced

Instruments:

- Violin
- Piano
- Guitar
- Drum

Lyrics:

- "Purple and gold pride"
- "Red Square gatherings"
- "Caps thrown high"

Techniques:

- Dynamic range changes
- High pitch
- Slower tempos for reflective moments

Album & Song Song Introduction



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Album cover & Album name









Album Name: "Capstone"

Why "Capstone"?

"Capstone" is more than our academic capstone at the UW; it signifies key life milestones. Each track reflects growth, resilience, and new beginnings, highlighting the album's deep, dual significance beyond the classroom.

From AI Beginnings to Human Empowerment: Our Song Sequence



BEGINNING

Al: 80%; Human Effort: 20%



CATCH 24

Al: 50%; Human Effort: 50%



TO BE

Al: 20%; Human Effort: 80%





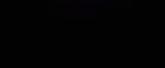




Behind the scenes...

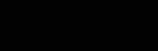


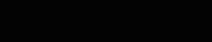




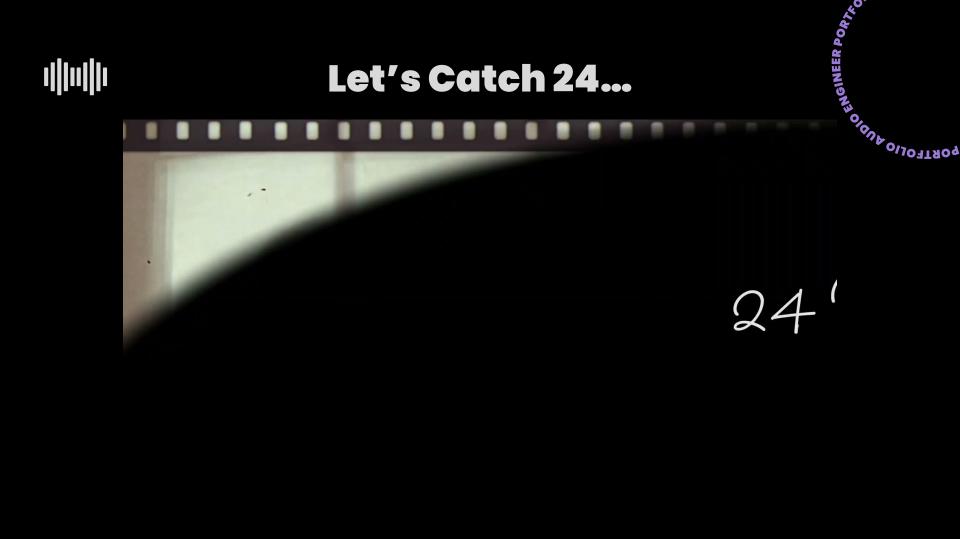








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BEGINNING IN HUSKY HUE

Reflect our growth journey

Theme: University life, discovery; Reflects new beginnings, learning, and guidance



From AI Beginnings to Human Empowerment:

CATCH 24

Theme: Graduation, anticipation, crossroads; Represents the balance between learned experience and new challenges

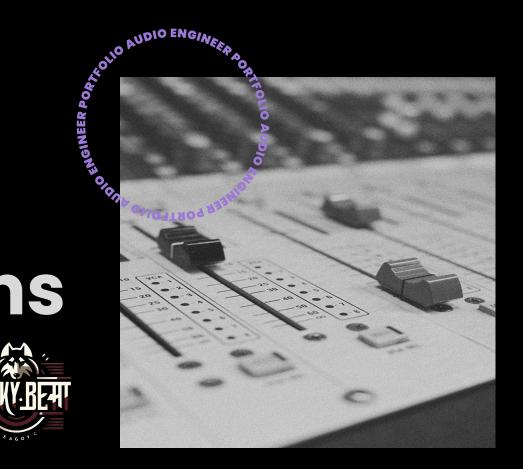


TO BE

Theme: Self-empowerment, self-discovery; Symbolizes personal growth, maturity, and emotive depth _..........

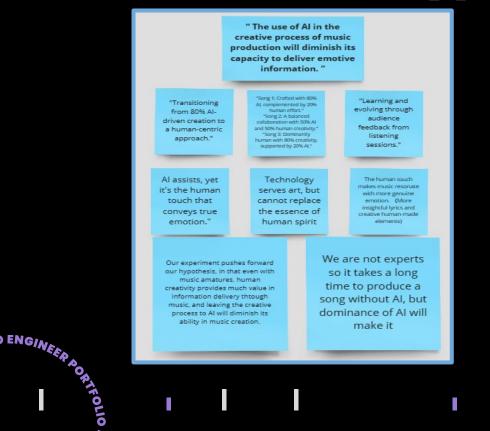
Course Reflections





••• Our Hypothesis





Role

Al acts as an assistant, not an artist.

Amount

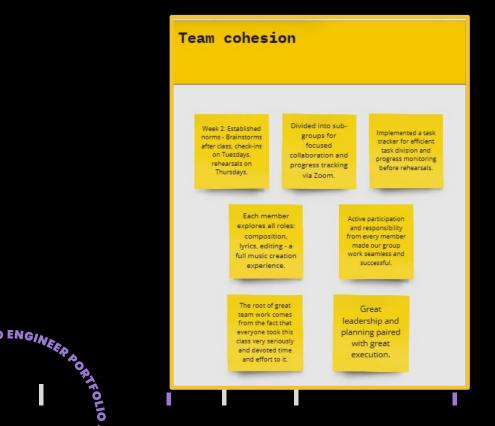
Too little is hard, too much is ineffective.

Information

Al interpret info as style, but not yet as true emotion.

••• •• Team Cohesion





Organized

We are a strong team, because we stayed organized.

Cooperative

We have a serious leader, and 4 efficient members.

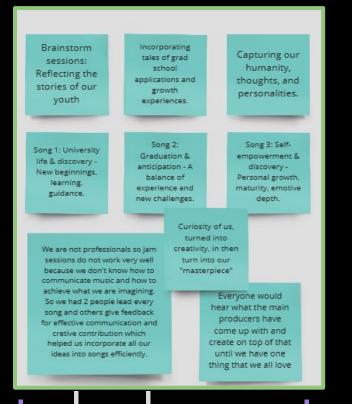
Proactive

We are more than punctual. We finish things in advance.

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Creation





Innovations

We always try new things-everything is new in this field.

Experiments

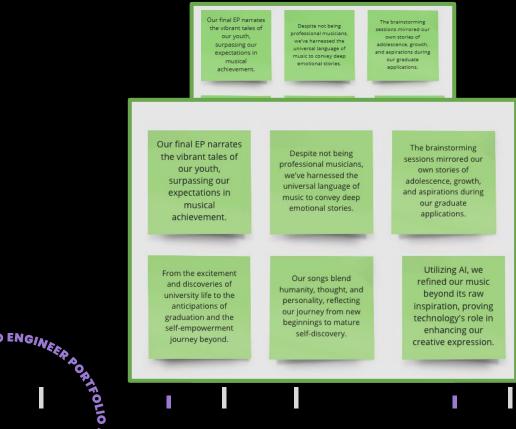
We meticulously planned the themes, style, and details.

Feedbacks

Asks feedbacks from prof, friends, and strangers.

•••

EP Reflection



Uncertainty

Trying this for the first time, we face the unknown.

Fulfillment

The proof of our work will be shown to the world!

Achievement

We did our best and believe it'll be a hit, no matter what others think.

Ensemble's Web App







Thanks!

Do you have any questions and suggestions?









STRAWBERRY JAM

Sloane, Kassy, Lily, StrawBae



THESIS STATEMENT

The lived experiences of each individual brings a unique arrangement of musical elements that create connections between the artist and listeners. Operating on generalized data, music produced by AI falls short of fully capturing the depth of emotion and individuality in human-made music.







Ai played a minor role in each song.

This wasn't our initial plan - but after hours of prompting we realized that:

Tapping into our own creativity, vulnerability and inner feelings is HARD and EXHAUSTING yet *very* rewarding. The state that AI generation is at today is impressive, but could not aid or reproduce what we created this quarter.



Strawbae - we love you but you're fired. (thanks for the drum beats on song #1 and the mastering of #2 and #3. The brainstorm help and the crappy corny lyrics - they were okay.

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01 **EP PRESENTATION**

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PERENNIAL

lasting or existing for a long or apparently infinite time; enduring or continually recurring.

Negative connotation: bad situations or states that keep occurring or that seem to exist all the time

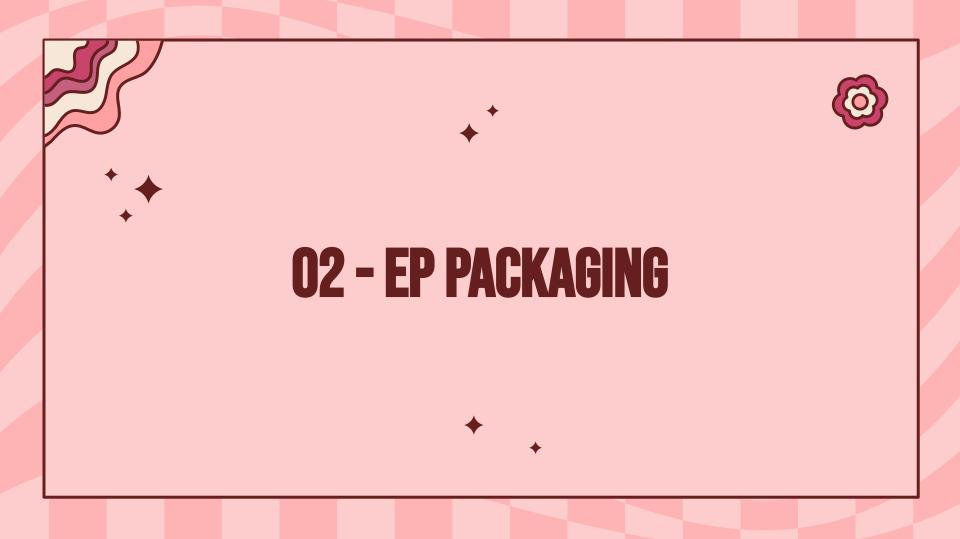


In our artistic collaboration, we combined our personal experiences to address themes like misogyny, toxic echo chambers, and societal expectations of women in our music. Our EP mirrors the lasting impact of unseen norms on our growth and identity. Though these challenges persist, we aim to inspire change and shed light on societal norms with our lyrics.

LISTEN NOW!



https://open.spotify.com/album/792oJh3FsjBN1uNYFP6FTr?si=iaDyQflyRT6bp1iE-nKu3A







ALBUM ART

- AI derived
- Solitude, endless suburbs, analog film (for the old school vibe)
- Intend to invoke feelings like: uneasiness, solitude, monotony



DIST. PLAN - SOCIAL MEDIA

Photo

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Check out our new EP!

My band Strawberry Jam just released a new EP named Perennial! It is out on streaming everywhere and we would love to hear your feedback!

To learn more about our band and our music, check out our website: https://sloane194.wixsite.com/strawberry-jam

Enjoy! 🍏

Social Media!

- Reach lots of people that we don't talk to everyday
 - Posted right when the EP dropped
- Lots of great feedback and reactions from people!

DIST. PLAN - LILY'S RADIO SHOW!



The radio show!

- Airs on Fridays after class
- Ability to reach more people from UW community
 - Posters printed and hung up around campus to advertise the show

DIST. PLAN - POSTER

FRI MAR 8, 6-7PM

@RAINYDAWG.ORG



PERENNIAL BY STRAWBERRY JAM

INDIE POP ROCK EP RELEASE TONIGHT!



RAINTON PERENNIAL TRAWBERRY JAM POP ROCK EP RELEASE

DIST. PLAN - LOCAL RECORD STORE





DIST. PLAN - TEXTS!



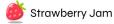
Send to friends and family!

- Sent link to EP on Spotify
- Feedback is biased but can also be brutally honest
 - I'm crying was so nervous

DIST. PLAN - UPDATED WEBSITE

We updated our site with all three of our songs and descriptions of the songs to provide listeners with a more comprehensive overview of our views and goals!

We have also linked the songs on the streaming services.



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Thesis Production Plan Songs About

SUBSCRIBI

Strawberry Jam

00.00 / 03.3

Experimental-AI Band

synthetic soulmate - Strawberry Jan

A Berry New Music Experience

Welcome to the delicious and energetic world of Strawberry Jaml We are a pop band based in Seattle, Washington, that combines human and artificial intelligence to create unique and captivating music experiences. Our band, comprised of three talented girls named Sloane, Kassy, and Lily, along with an AI bot named Strawbee, is dedicated to delivering innovative and creative music that reflects our diverse talents and influences. Click here to listen to our latest single and join us on our musical journey!

LINK TO WEBSITE

Omg just listened HAHHAHAHAH

Perfect music for an emo high schooler who wants to feel understood!

All the songs go together well like very much vibe is the same in a good way

Cohesive 🔌 🍋

Yesss omg I looooove

Lyrics hit 😂 🙌 🙌

Did you guys make all the melodies and stuff?

They give me heavy reminders of new order and crystal castles?

So freaking cool

I feel like unconfined growth would be crazy if I was like hard rock, like lowkey screaming the lyrics

But you guys sounds great

That one reminds me of my chemical romance

FEEDBACK



These are seriously good sloaney!!

I can't get over how good the music is

The last one is my fav

Lmao I think your voice sounds so good

Like clairo

Great job girls ! The 3rd is my favorite too. I think the whole thing is a really strong effort, and I bet you learned a lot about how hard it is to make «real » songs. What was the order of creation for these 3 songs ?

Dad Shea

I thought they got better with each 😀

Mom Shea

Finally got a chance to listen 'and I love 🤎

Yes, I hear some New Order and MCR. What an honor 💘

Oooo such an angsty cover love it	FEEDBACK	OMG I LISTENED TO THEM
Wow your page is so official!! Listening to them now		I love the opening of synthetic soulmate and the message of unconfined growth so good
Wait I think synthetic soulmate is my fav after listening to them	You did great! I'm going to have my music teacher friend listen too tomorrow morning 💜	uncommed growth so good
	So proud of you 🥹	WOWOWOW
It will be playing on repeat 🔃 as I finish an essay	HOLY SHIT TELL HER ITS SO FUCKING GOOD	Where did that cover photo come from? It's cool
Ooooo we got that explicit E	WAIT WTF SHE DOESNT KNOW MUSIC AND SHES DOING THIS SHIT	
	Sending this to my musician friends	



FINAL THOUGHTS!



- Learned A LOT!
- Between the 3 of us we had fairly limited musical experience, especially regarding song-writing
- We were complete strangers at first, so performing/recording in front of each other was very awkward at first
- Definitely fun participating in this experiment and trying something completely new
 - Time constraints played a huge role in our songs always something we wish we could change but overall happy and proud with how our EP turned out!





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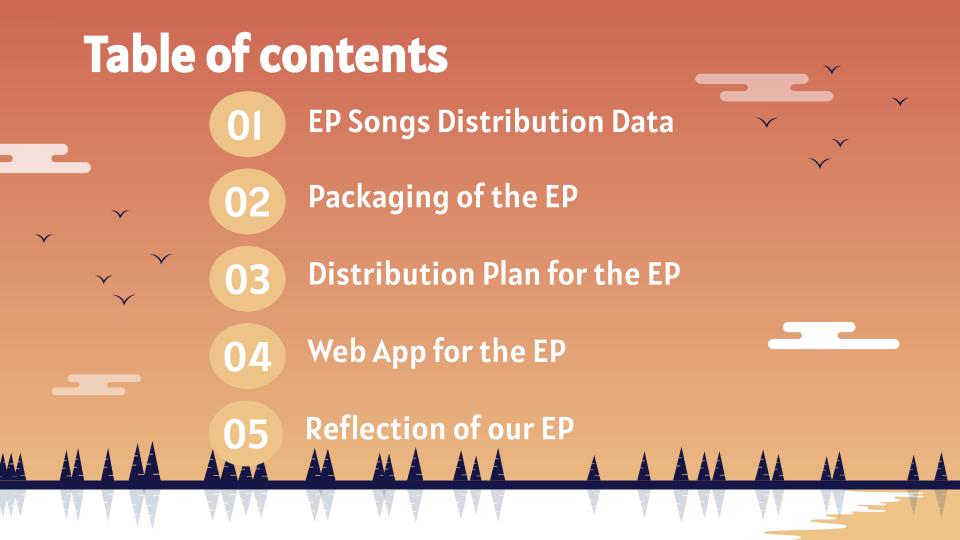
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Weather Report EP: Weather Report

Weather Report: Zoey, Lydia, Brian, Siyu, Kexuan

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EP Songs Distribution Data

Thesis Statement for the EP

• Examining how AI augments music's capacity for information delivery, this study delves into the emotive nuances of seasonal compositions—spring's joy, summer's warmth, autumn's melancholy, and winter's stillness—revealed through an exploration of three songs within our **Extended Play (EP).**











Packaging of the EP

 $\mathbf{02}$







weather report

EP Songs

Specifically, we select <u>'Memotape'</u> as our leading track, illustrating spring's initiation of the yearly cycle. Through this, we aim to immerse our audience in the evolving sensations of the seasons as expressed through music, highlighting the profound ways AI can deepen our engagement with and understanding of seasonal emotional landscapes.



Detail about Songs

Memotape

- Al: Magenta Studio
- Composition: Cassette SFX in the beginning and end. Use of wind instrument (flute) for spring. 100 BPM

Winter Fall

AI: X studio for AI vocal

Composition: Japanese weather forecast SFX. Rain and fire SFX to invoke Fall and Winter seasons. 80 BPM

Orange Sunse

Al: Suno, Magenta Studio

Composition: Ocean waves SFX, use of wood percussion set. 110 BPM

Distribution Plan for the EP

Digital EP



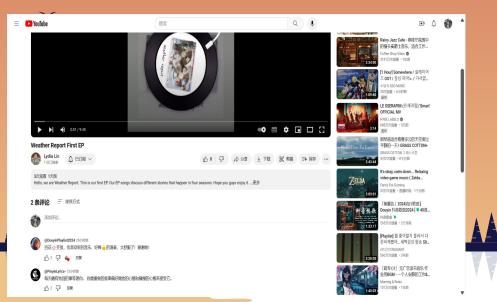
Youtube

https://youtu.be/qoZVUZBpPkA



Soundcloud

https://soundcloud.com/siyu-lin-224914593/ memotape?si=167f03ab61b6415a82889d2f72 793745&utm_source=clipboard&utm_mediu m=text&utm_campaign=social_sharing





EP Feedback

- Like the song, make me in spring.
- Cool and gentle

Summer 'Orange Sunset'

 Impressive happy melody with energy vide
I like the variation of the song and also the

oceans wave

Autumn/Winter

'Winterfall'

- Like the melody of the song
- The vocal could be better

Web App for the EP

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WEBAPP

Weather Report

Who We Are

We are five Informatics students studying at the University of Washington. We create and compose songs to examine how AI augments music's capacity for information delivery, this study delves into the emotive nuances of seasonal compositions—spring's joy, summer's warmth, autumn's melancholy, and winter's stillness—revealed through an exploration of three songs within our Extended Play (EP).

Our Reflection

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Miro Board

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Thanks!

Zoey, Siyu, Lydia, Brian, Kexuan



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About A Girl by Coughing Up Phlegm:

An Auditory Experiment Navigating Al Usage in Music



Thesis

Al tools can both streamline and democratize the music-making process in the short-term, but without conscious usage and rigorous self-regulation, complacent over-reliance on Al will homogenize the music industry and tarnish the bond between artist, song and listener in the long-term.



coughinguphlegm.com

Distribution









About A Girl

Coughing Up Phlegm



This is a user-generated page powered by HyperFollow.



Coughing Up Phlegm • 2024 • 3 songs, 9 min 47 sec



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23 likes

m1key233333 Our band for INFO 492 made a new band called Coughing up Phlegm! Please go check it out in: https://spotify.link/9vh0zApUNHb

Feedback

- "Loved the songs, it would be better if the vocals got more mixed in with the beat"
- "I like the narrative of Valentine's Day"
- *"Aisle 4* gives me Passionfruit Drake vibes"
- "You and your groupmates' vocals being distorted differently takes me out of the song a bit"
- *"Fadeaway* is fire"

Reflection - Team

- Al tools allowed 4 newcomers to music to create something with a more refined, professional sound
- At times it was difficult to synthesize 4 individuals' ideas along with Al output into a single, cohesive song
- Increased reliance on digital music production tools can make artist collaboration more difficult, as there is more crossover in skillsets and ability

Reflection - Creation

- The AI vocals were a bit jarring at times
- ChatGPT proved useful for assistance with writing lyrics, particularly for finding specific rhymes
- LANDR's AI mastering and Voice.ai's AI stem-splitting were highly effective and elevated the songs beyond our own capabilities
- We managed to implement AI elements without compromising our artistic expression

Reflection – EP

- Aisle 4 feels less polished, Valentine's Day feels less ambitious than Fadeaway
- Vocals were a point of struggle throughout the EP, whether it was our inexperienced human vocals, choppy AI vocals, or poor results from our free auto-pitch software
- Proud to have created and released music for the first time, which would not have been possible without the confidence AI assistance provided us with
- Provides a strong jumping-off point for future music creation, both through:
 - Increased knowledge on where AI implementation can be of use, and where it might supersede artistic expression
 - Experience collaborating and seeing a song through from start to finish

