

COMS 611: Popular Music/Media/Recommender Systems

W-5 Arts Building

Kids these days will never understand



General information

Fall 2023

Mondays - 2:35 pm-5:25 pm

Instructor information

Gustavo Ferreira, PhD (he/him). You can call me Gustavo.

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Office location / office hours: Arts W-233 / Mondays 5:30 pm- 8pm – in-person or zoom (right after class or by appointment)

Communication plan: I will post all course updates and official information on myCourses. You should check it for updates at least once a week. To book appointments, we will use a Calendly link available on myCourses. You can direct other private inquiries by email, and I will try to respond within 2 business days.

Course overview

Generative AI is the topic of 2023. These machine learning technologies which predict text, sound or visual elements to produce images, text, voice and music are being propped up and questioned in creative industries across the world. Following the release of ChatGPT, technology companies, media and commentators have raved about a (claimed) potential for a future Artificial General Intelligence, and its possible catastrophic consequences. In music, the use of these technologies to reproduce famous artists' voices and styles, like Drake and The Weeknd, widened for the general public questions of copyright and creativity which are very common in the specialized music media.

In this seminar, rather than prioritizing this hot technological buzzword of the year, our main goal is to break with the "AI Hype." We will investigate these technologies through one of its more technical and less appealing names: music recommender systems (MRS), which are mostly machine learning technologies themselves. These algorithms predict music choice and output ranked lists of songs to be listened to in different contexts, mainly music streaming platforms. We will use this specific technology and industry as a

point of convergence between the history and theory of audio media, music culture, and automation. We will explore research methods for understanding the historically unstable relationship between music recording and media industries, cultures of production and consumption. So instead of taking these technologies as powerful disruptors in cultural consumption, we aim to look at contingent practices of cultural curation and recommendation as essential to their development, adoption, and meaning.

The following are the questions we are going to explore. Some readings will address these topics directly, others are there to inspire them or create links to your research interests. Are human and algorithmic curation/recommendations independent and distinct? How can we study algorithms, platforms, and cultural industries when these operate in such secretive and specialized logics? What purpose do these technologies serve to platforms and to listeners? What are the present harmful and beneficial results of MRS to musicians, listeners, and the broader music culture? What are ways of framing issues of diversity, racism, and cultural imperialism that stem from recommender systems adoption? How do distinct local cultures and industries differ in their relationship with global platforms and these systems? How does the study of music culture and music media contribute to the broad questions on AI and creative labour?

Learning outcomes

The goal of this seminar is to identify research methods and theories for the study digital music media, circulation, and culture. By the end of this course, you will be able to

- ☐ **Relate** technical, economic, and cultural aspects to the analysis of music mediation.
- ☐ **Grasp** the logics employed in the development of Music Recommender Systems.
- ☐ **Identify and explain** critical elements of the study of AI and culture.
- ☐ **Raise** interesting questions regarding music, recording and streaming platforms and contemporary cultures of production and consumption of recorded music.
- ☐ **Design** appropriate research to deal with these questions and **practice** the defense, theoretical framing, and critique of such research projects.

Instructional methods

- ☐ Student presentations
- ☐ Class discussions
- ☐ Short Lectures
- ☐ Small group discussions

Expectations for student participation

As a seminar, the course is built on the students' discussions. You need to read the material for each week and be prepared for talking in every class about the thoughts you have about the reading. So, the expectation is that you can engage in conversations, raise questions, and associate the readings to any topics of your interest when in class.

Class Conduct

When interacting with others, you should always be attentive to their well-being, use polite and non-aggressive language, justify your positions, and give sources of information.

When expressing opinions, always reflect on how your thoughts align with different realities and perspectives. In this course we value solidarity as a learning practice: Try to think and take your positions from a solidary

position. Acknowledge how your context is affected and affects others. We are allowed to disagree, and we should understand that more than one thing can be true.

Required course materials

All required readings will be available online through McGill services: myCourses, Course Readings and Library or open access links.

Other materials such as videos and podcasts will be linked or referenced on myCourses.

Full information on materials can be found on the schedule below.

Optional course materials

Recommended Readings and other materials are listed alongside required materials on the schedule below.

Course content

The course explores histories and theories of music circulation through media. It's divided in 6 parts that present topics on how to think about media, music creation, music listening and AI.

Part I - Mediations and Medialities

General approach about of Music, Culture and Tech

Mediation, value, and music

Part II - Industry, Platforms, Algorithms

Political Economy, Streaming and Recommendation

What are Music Recommender Systems?

Part III - More on AI and Algorithms

Algorithmic Culture and Power

Perspectives in AI, Curation and Discovery

Part IV - Playlists and Formats

Formats and Curation

Radio and Playlisting

Part V - Formatting with Algorithms

Streaming, Data and Playlists

Part VI – Implications

Global Cultures, labour, and platformization

Issues of Fairness and Diversity

Evaluation

Here's a quick breakdown of assignments and grading:

Name of assignment	Due date	% of final grade
1. Participation	Weekly	20
2. Facilitation	TBD	20
3. RR Project	30 Oct	30
4. CTT Project	27 Nov (first version) 11 Dec (revised version)	30

All assignments relate to the goals of the course, but I also highlight a specific goal for each of them that explain why they are formatted as they are.

1. Participation – Weekly – 20% of final grade

Your grade for participation will be based on your ability to express your ideas about the readings and discussion of theory, objects and problems raised in the seminar. Students are encouraged to take notes and, at least, make one comment every class pertaining the reading and topic of the week. The goal is to exercise your critical thinking and fixate ideas stemmed from our course.

What counts as participation:

- Being present and on time
- Contributing your thoughts in class
- Posting your question/comment on the weekly class forum
- Coming to office hours to discuss ideas and assignments.

This is a holistic evaluation based on my observation.

2. Facilitation – TBD – 20% of final grade

You will choose one class to facilitate the discussion in class and then will:

1. Plan and deliver a presentation (slides not required) summarizing the text.
2. Relating to the topic of your presentation, choose a news report of an event or phenomenon or another media object like short film, reading, podcast, social media trend or post, etc., and present to the class as an example for discussion.
3. Raise questions for the classmates that relate to the text, the object you brought and the other readings.

The goal is to exercise summarizing, presentation skills and problematization skills.

Criteria for evaluation: coverage of the reading's elements, coverage of the reading guide, quality of the questions you raise for our discussion, relationship of your questions to the other readings of the week.

3. Recommender Relationships Project – 30 Oct – 30% of final grade

Short research on how different actors in music culture interact with Recommender Systems and Streaming Platforms. Students will engage in primary source research about the current use of MRS. This will take the form of a short paper (around 6 pages, 12pt, double-spaced) presenting interviews or analysis of a musician, listener, DJ, radio professional, playlist editor, curator, RS programmer or other related actor's relationship with the current MRS landscape and a detailed description of such MRS. For example, you can describe how a musician shapes their on-line presence or their creative process considering MRS as their circulation media, or how the need to correspond to MRS shapes how an editor or DJ decides to build their sets/playlists or how streaming users describe their use of algorithmic playlists in their listening habits. The goal is to become familiarized with MRS systems and how they affect music creative practices.

Criteria: level of detail and expression of understanding of how MRS works, quality of articulation between your questions to the interviewee and our theoretical perspectives, quality of your presentation and analysis of the interview.

4. Culture, Theory, Technologies Project – 27 Nov / 11 Dec – 30% of final grade

Your final project approximates your research interests or projects with the theoretical elements of our course. You will write a research proposal that coherently argues for the pursue of a research question. You do not need to write about music culture or MRS directly, but you should deal with elements of creative practices, history, theory, and technology inspired and citing works we read in the course. The goal is to deepen your theoretical framework and advance your research.

You will submit a first version of the proposal and classmates will read it. We will meet in groups where you will get feedback on your work so you can revise it and submit a second version which I will grade.

Criteria: coherence between your theoretical framework and your research question, coherence between your proposed methods and your question, relevance of the topic.

Course Schedule

4-Sep-23	Week 0 Labour Day
No Class	
11-Sep-23	Week 1 – General approach about of Music, Culture and Tech, and AI Hype Part I - Mediations and Medialities

Course outline

Katz, Mark (2022) Music and Technology: A Very Short Introduction.

Bender, Emily M. and Hanna, Alex (2023) *Episode 8: The ChatGPT Awakens*. Mystery AI Hype Theater 3000. Available at: <https://www.buzzsprout.com/2126417/13347091-episode-8-the-chatgpt-awakens-january-20-2023> (Accessed 04 Aug 2023). **(Podcast – 64mins)**

18-Sep-23

Week 2 – Mediation, value and music - ONLINE

Part I - Mediations and Medialities

Amaral, Adriana da Rosa, Soares, Thiago and Monteiro, Camila Franco (2017) “What’s Going On’ is Soul Music’s ‘Sgt. Pepper’s’”: Autonomy, Canon and Value in a Greatest Music Albums List. *Comunicação Mídia e Consumo* 14(41): 126-145.

Picaud, Myrtille (2022) Framing performance and fusion: how music venues’ materiality and intermediaries shape music scenes. *Am J Cult Sociol* 10(2): 285-315.

Straw, Will (2015) Mediality and the Music Chart. *SubStance* 44, No. 3, ISSUE 138: Intermedialities 128-138.

25-Sep-23

Week 3 – Political Economy, Streaming and Recommendation

Part II - Industry, Platforms, Algorithms

Giblin, Rebecca and Doctorow, Cory (2022) *Chokepoint Capitalism*. Beacon Press. Chapter 6. Why Spotify wants you to rely on playlists.

Prey, Robert, Esteve Del Valle, Marc and Zwerwer, Leslie (2022) Platform pop: disentangling Spotify’s intermediary role in the music industry. *Information, Communication & Society* 25(1): 74-92.

Drott, Eric (2018) Why the Next Song Matters: Streaming, Recommendation, Scarcity. *Twentieth-Century Music* 15(3): 325-357.

2-Oct-23

Week 4 – What are Music Recommender Systems?

Part II - Industry, Platforms, Algorithms

Seaver, Nick (2022) *Computing Taste: Algorithms and the Makers of Music Recommendation*. University of Chicago Press. Chapter 2 – Captivating Algorithms

Jannach, Dietmar, Kamehkhosh, Iman and Bonnin, Geoffray (2019) Music Recommendations. In: Berkovsky, Shlomo, Ivan Cantador and Tikk, Domonkos (eds) *Collaborative Recommendations: Algorithms, Practical Challenges and Applications*. Singapore: World Scientific Publishing

9-Oct-23

Week 5

Thanksgiving – Reading Week

No class

16-Oct-23

Week 6 – Algorithmic Culture and Power

Part III - More on AI and Algorithms

boyd, danah (2023) The Structuring Work of Algorithms. *Daedalus* 152(1): 236-240.

Nowotny, Helga (2021) *In AI We Trust: Power, Illusion and Control of Predictive Algorithms*. John Wiley & Sons.

23-Oct-23

Week 7 – Perspectives in AI, Curation and Discovery

Part III - More on AI and Algorithms

Georgina Born et al. (2021) Artificial intelligence, music recommendation, and the curation of culture. Schwartz Reisman Institute for Technology and Society, CIFAR, University of Toronto.

<https://srinstitute.utoronto.ca/news/ai-music-recommendation-and-the-curation-of-culture>

Freeman, Sophie, Gibbs, Martin and Nansen, Bjorn (2023) Personalised But Impersonal: Listeners' Experiences of Algorithmic Curation on Music Streaming Services. *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*,

Cunningham, Sally Jo, Bainbridge, David and McKay, Dana (2007) Finding new music: a diary study of everyday encounter with novel songs.

30-Oct-23

Week 8 – Formats and Curation

Part IV - Playlists and Formats

dos Santos Silva, Melina Aparecida (2018) Letters, cassette tapes and zines: The circulation of Brazilian heavy metal as a gift system. *Metal Music Studies* 4(1): 241-249.

Osborne, Richard (2012) *Vinyl*. Farnham: Ashgate. Chapter 5 – The LP

Wikström, Patrik and Burnett, Robert (2009) Same Songs, Different Wrapping: The Rise of the Compilation Album. *Popular Music and Society* 32(4): 507-522.

Due date: RR Project

6-Nov-23

Week 9 – Radio and Playlisting

Part IV - Playlists and Formats

Klaess, John (2022) *Breaks in the Air: The Birth of Rap Radio in New York City*. Duke University Press. Chapter 4 – Programming the street at WRKS.

Berland, Jody (1990) Radio Space and Industrial Time: Music Formats, Local Narratives and Technological Mediation. *Popular Music* 9, No. 2, Radio Issue 179-192.

Ahlkvist, Jarl A. (2001) Programming philosophies and the rationalization of music radio. *Media, Culture & Society* 23(3): 339-358.

13-Nov-23

Week 10 – Streaming, Data and Playlists

Part V - Formatting with Algorithms

Bonini, Tiziano and Gandini, Alessandro (2019) “First Week Is Editorial, Second Week Is Algorithmic”: Platform Gatekeepers and the Platformization of Music Curation. *Social Media + Society* 5(4):

Morris, Jeremy Wade (2015) *Selling Digital Music, Formatting Culture*. Oakland: University of California Press. Chapter 5 – Music in the Cloud

Fenby-Hulse, Kieran (2016) Rethinking the Digital Playlist: Mixtapes, Nostalgia and Emotionally Durable Design. In: Nowak, Raphaël and Whelan, Andrew (eds) *Networked music cultures*. London: Palgrave Macmillan: 171-188.

20-Nov-23

Week 11 – Global Cultures, labour, and platformization

Part VI - Implications

Guest: Prof. Rafael Grohmann - UofT

Grohmann, R. & Araújo, W. (2021). Beyond Mechanical Turk: the work of Brazilians on global AI platforms. In: Verdegem, P. (ed). *AI for Everyone? Critical Perspectives*. London: University of Westminster Press.

Grohmann, R et al. (2022). Click Farm Platforms in Brazil and Colombia: updating the informal work. *Work Organisation, Labour & Globalisation*.

de Peuter, Greig et al (2020). *Sharing like we mean it: working co-operatively in the cultural and tech sectors*. Toronto: Cultural Workers Organize.

27-Nov-23

Week 12 – Issues of Fairness and Diversity

Part VI - Implications

Epps-Darling, Avriel, Cramer, Henriette and Bouyer, Romain Takeo (2020) Artist gender representation in music streaming. *ISMIR*, 248-254.

Tofalvy, Tamas and Koltai, Júlia (2021) “Splendid Isolation”: The reproduction of music industry inequalities in Spotify’s recommendation system. *New Media & Society* 146144482110221.

Due date: CTT Project

4-Dec-23

Week 13 – Group discussions

Wrap Up

Group review of CTT Projects

Final conversation

11-Dec-23

Week 14

Due Date for Revised CTT Projects

Language of submission of assignments

“In accord with McGill University’s [Charter of Students’ Rights](#), students in this course have the right to submit in English or in French written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives.” (Approved by Senate on 21 January 2009)

« Conformément à [la Charte des droits de l’étudiant](#) de l’Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté, sauf dans le cas des cours dont l’un des objets est la maîtrise d’une langue. » (Énoncé approuvé par le Sénat le 21 janvier 2009)

Academic integrity

“McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the [Code of Student Conduct and Disciplinary Procedures](#)” (Approved by Senate on 29 January 2003) (See [McGill’s guide to academic honesty](#) for more information).

« L’université McGill attache une haute importance à l’honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l’on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon [le Code de conduite de l’étudiant et procédures disciplinaires](#) » (Énoncé approuvé par le Sénat le 29 janvier 2003) (pour de plus amples renseignements, veuillez consulter le [guide pour l’honnêteté académique de McGill](#).)