PAT 514 (Winter 2025)

# Contemporary Software Techniques in Performing Arts Technology

#### Introduction

Instructor: Hao-Wen Dong



### Welcome! Tell Us about Yourself!

- Name
- Pronouns
- Program/year
- Research interests
- What is your main instrument (if any)?
- What is your tech stack?
- What is one new tech you always wanted to explore?

### About Me

- Hao-Wen (Herman) Dong
- Pronouns: he/him
- Email: hwdong@umich.edu
- Office: Stearns 131 (15 min walk to the north from Moore)
- Office hours: By appointments
- Research areas: Generative AI for music and audio creation



## **Course Logistics**

#### Communications

• Course website: Syllabus, schedule, readings, recordings, etc.

• Email: Announcements

Google Chat: Q&A



hermandong.com/teaching/ pat514\_winter2025

#### Course Format

- Workshop style
- The **semester-long project** is the main component of this course!
- In class, we will be discussing papers
  - (Week 2–4 ) **How to** *read*, *write* and *review* a paper?
  - (Week 5–6) **Peer review session** on your writing samples
  - (Week 7–8) **Paper discussions** on best papers in selected conferences/journals
  - (Week 10–13) **Paper discussions** on related work to your project
  - (Week 15–16) **Project presentation** & **peer review session** on report drafts
  - Before each class, we will do **quick 10-min updates** on your project progress

### Assignments

- Four assignments
  - Peer review (writing samples)
  - Paper review
  - Paper review
  - Peer review (report drafts)
- Due at 11:59pm ET on the date specified
- No late submissions! Submit your work early and update it later.

### Project

- Open-ended individual project
- Requirement: New techniques you haven't explored before
- Milestones (tentative)
  - **Pitch**: Jan 29
  - Report draft: Apr 2
  - **Presentation**: Apr 14
  - Final report: Apr 28
- Due at 11:59pm ET on the date specified
- No late submissions! Submit your work early and update it later.

### Grading

#### Assignments (40%)

- Peer review (writing samples) 15%
- Paper review 5%
- Paper review 5%
- Peer review (report drafts) 15%
- Project (60%)
  - Presentation 10%
  - Results 25%
  - Final report 25%
- All grading and regrade requests will be handled on Gradescope

#### Policies: Attendance

- In-person attendance is strongly encouraged
- No recordings to facilitate discussions
- Please attend in-person
  - When we're discussing your writing
  - When you're leading the paper discussion
  - For **project pitch** (Jan 29)
  - For project presentation (Apr 14)

### Policies: Generative Al Usage

- Feel free to use GenAl tools (U-M GPT, ChatGPT, Stable Diffusion, DALLE, etc.) in your workflow. However, you must disclose your usage of GenAl services in your write-ups.
- You take full responsibility for AI-generated materials as if you had produced them yourself: ideas should be attributed and facts should be true.

### Policies: Academic Integrity

- Plagiarism and cheating violate SMTD's Academic Code of Conduct. All plagiarism, cheating and other academic misconduct cases will be reported to SMTD's Office of Academic and Student Affairs.
- All assignments must be completed on your own. You are welcome to exchange ideas with your peers, but this should be in the form of concepts and discussion, not in the form of writing and code.
- You must provide proper citations/references for any external resources you use in your writing and code.

## Any Questions on the Syllabus?



### What's Next?

- Think about what you want to work on for the whole semester!
  - Requirement: New techniques you haven't explored before
- Reading (We will discuss these papers in the next class)
  - Efficient Reading of Papers in Science and Technology by Michael J. Hanson and Dylan J. McNamee
  - How to Read a Paper by Srinivasan Keshav
  - How to read a research paper by Michael Mitzenmacher
  - (Optional) <u>How to Read a Technical Paper</u> by Jason Eisner
  - (Optional) <u>Perceptions of scientific research literature and strategies for reading papers</u> <u>depend on academic career stage</u> by Katharine Hubbard and Sonja Dunbar