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In-person office hours or virtual [REDACTED]

DIGITAL 357/ FTVM366

Digital Studies Institute, U of Michigan

Winter 2023

Class Room: [REDACTED]

## Race and the Technological Imagination

*(Updated 2/20/2023; syllabus subject to revision)*

### Course Description

In digital culture, we are constantly engaging in acts of the imagination—from the “user” we assume to be on the other side of the screen, to the personification of AI algorithms, to myths of innovation progress and technological benevolence, to who is included in utopic and dystopic visions of technological futures. Drawing from literary, artistic, and theoretical texts, we will examine how technologies and technological worlds are produced through imaginative techniques, often with real-world consequences. This course examines how ideas of race and social difference (including gender, sexuality, and disability) reflect how we imagine information technologies, shaping how technical systems are embedded within human worlds. How is the history of the digital also a history of race? What is the place of literature and art in the technological lab?

A foundational premise of the course will be to consider technology itself as a product of literary or artistic expression, and thus a world-making project subject to reinvention. Topics will include Silicon Valley history, pre-digital predecessors such as the US railroad, artificial intelligence machines, surveillance cultures, digital gaming, and more. Since the technological imagination is a contested terrain, this course will also explore alternative expressions of technology by writers, artists, and theorists, with emphasis on works by creators and makers of color. Through a seminar format with discussion and lecture, students will learn how cultural forms can intervene in technical design as well as develop critical frameworks and vocabulary for recalibrating and reimagining our digital present.

### Learning Objectives

Through a mix of humanistic approaches, ranging from textual, visual, and multimedia analysis, students will be able to:

- **Identify** narratives of technological progress and **analyze** their social and political consequences.
- **Explain** how race, gender, sexuality, and disability are encoded into sociotechnical systems, processes, and beliefs.
- **Interpret** how cultural and artistic forms, such as literature, art, film, games, and popular media, reflect social concerns of identity and power.
- **Express** complex, critical ideas through argument-driven essays and multimedia forms.

## Assignments

In order to successfully complete this course, you must submit all assignments for a grade (for instance, you cannot miss an entire short essay assignment and still pass the class). Assignments must be turned by their due date or be penalized by half a letter grade (or point equivalent). However, urgent things come up. If you need an extension, **you must contact me at least 24 hours before the due date**. I will try my best to accommodate. Assignments must be submitted via Canvas. I do not accept emailed assignments.

- **Class Contribution** **15%**  
Thinking together throughout a course means there will be a diversity of learning styles and approaches. This in-person class will **require attendance, with some flexibility**, given the urgent circumstances that come up in life.

At the beginning of the course, you will complete a "Class Contribution survey," where you will have the chance to share how you hope to contribute to/engage in the class. While meaningful participating in discussion is encouraged and valued, I recognize that we all process material in different ways. Outside of vocal participation in class, other ways to contribute include:

1. Note-taking for our class discussions and distributing notes to all students
2. Coordinating an out-of-class writing feedback session with a group of classmates and submitting a write-up reflection
3. Sharing relevant contemporary articles you come across in the news with the class, with your thoughts attached
4. Other ways that contribute to overall class learning

At the end of the course, you will complete a "Class Contribution reflection (200-300 words)," where you will assign yourself a class contribution grade with a narrative explaining the reasoning. This reflection will factor strongly in the class contribution grade you ultimately receive.

- **Discussion Posts** **15%**  
You will submit **7 weekly discussion posts (200-300 words)** analyzing the week's readings covering Monday and Wednesday. You can choose to focus on one reading or all of the week's material. These posts are due on Tuesday at 11:59pm EST before Wednesday's class session. **The first two weeks of readings are mandatory for discussion post submission**, and you have the remaining weeks to decide which weeks you will submit 5 additional posts. Your post can also directly respond to another classmate's discussion post. Posts are NOT straight summaries or reports of the readings. Instead, they should offer valuable reflection, analysis, close-reading, and/or connections to broader themes and topics. They are graded on a pass (check plus = 10/10, check = 8/10) or fail (minus = 5 or less/10) scale. Each canvas post must include the following:
  1. A clear understanding the reading's argument or purpose (ask yourself: what question is the author trying to answer?). To move beyond summary, think about the argument's implications, contradictions, and/assumptions.
  2. At least one quote (with page citations) from the readings that is *meaningfully* incorporated into your post. Choose argument-driven quotes that you can interpret

or evaluate rather than descriptive quotes that provide factual information. Unpack the quote for us: think about its word choice, its implications, its assumptions, or maybe make connections to other parts of the reading(s).

3. At least one significant question posed to the class that relates to the reading. Keep in mind the scale of question. If you want to ask LARGE questions ("how do we stop racist tech?"), make sure to also scaffold this question with smaller, reading-specific questions ("Do you think the author's use of X is helpful for Y, in the context of tech justice?") This question can also be something that you did not understand about the reading.
- **Short Essays (x2)** **30% (15% each)**  
Throughout the semester, you will submit two short essays in lieu of a midterm exam. **The full detailed prompt and rubric will be distributed at a later date in the semester.** Each paper will include a proper header, works cited page, and be between 4-5 pages long (double spaced, 12 pt. font). You must also submit a mandatory cover page at the beginning of your paper. The cover page is addressed to yourself and will be between 300-400 words. The cover page is a formal piece of writing in letter form and will discuss:
    1. What you are most proud of accomplishing in the paper
    2. Why you decided to write on this topic
    3. What you struggled with in the paper
    4. What more you could add / change if you had more time to work on it
  - **Final Project: Proposal** **5%**  
Weeks before your final project is due (see semester schedule), you will submit a proposal which will include a 300-500 word description of the critical-creative project you hope to build for our class-wide "Technological Imagination" portfolio. For your bibliography, you must cite at least 3-4 texts or cultural works from the class. You must also include an additional list of 3-4 sources outside of course material in your bibliography.
  - **Final Project: The Technological Imagination** **35%**  
Completed individually or in small groups of 2-3, the final project will be a critical-creative project that will allow students to express research-based argumentation and analysis in various creative forms. Just like the cultural forms that have guided and enhanced our thinking in the course (from poetry, to games, to graphic novels, to short fiction, and more), these creative forms are not simply "entertainment" but provide serious, critical commentary on a social aspect of technology. You will have the opportunity to distill ideas and arguments from the course (the "critical" part) into a media form of your choice (the "creative" part). **The full detailed prompt and rubric will be distributed at a later date in the semester.** Possible final products might include (among many other possibilities!):
    1. a media-rich research essay made for a public readership on a publishing platform such as Scalar (default option)
    2. a curated digital exhibition of multimedia art (not already covered in class) that critical responds to and enhances a key argument of your choice
    3. a boardgame or a videogame (or detailed designed prototype of one) that allows the player to experience the racial logics of algorithms

## Required Texts for Purchase (Other weekly readings are available on Canvas)

- Janice Lobo Sapigao, *microchips for millions* (ISBN: 978-0-9981792-1-6)
- Lillian-Yvonne Bertram, *Travesty Generator* (ISBN: 978-1-934819-84-5)

## Optional Texts for Purchase (Scanned pdfs are uploaded; purchase if you prefer a hard copy)

- Ted Chiang, "The Lifecycle of Software Objects" from *Exhalation: Stories* (ISBN-13: 978-1101947883)
- Jamil Jan Kochai, "Playing Metal Gear Solid V: The Phantom Pain" from *The Haunting of Hajji Hotak and Other Stories* (ISBN-13: 978-0593297193)

## Course Policies

- **Attendance**  
This class requires **in-person attendance, with some flexibility**. We will take attendance each class in our [REDACTED]. Because your class contribution grade will take into account your attendance, participation, and other forms of engagement and contribution, it is a holistic grade assigned to you at the end of the semester. **If you are ill / feeling / positive for COVID, do not come to class! Rest and recover!** You do not need to notify me when missing one class, if your overall attendance in the course is consistent. However, you do need to notify me if some circumstance will prevent you from regularly attending in-person. **For serious obstacles to required attendance, communication with me is key.** While this is not a hybrid class, I will try my best to record lecture / discussion via Zoom or Lecture Capture for future reference.
- **Community Expectations and Standards**  
The success of this course will be the result of the openness, communication, and community we build together. Because we will be discussing real-world issues of social difference (race, gender, sexuality, disability, class, etc.), different backgrounds and perspectives will contribute to a lively course. Students may not agree on all issues, but as a ground rule, hate speech, bigotry, and other violent acts will not be tolerated. I expect us to handle all topics with dignity, care, and respect. This means that we sometimes must lean into the messiness of these topics. We will sometimes leave the class without any solutions or answers. Nonetheless, to engage in civil discourse, we must continue to ask hard questions, listen and support each other in our shared growth, and embrace our very own contradictions.
- **Reaching your professor**  
The best way to reach your professor is through email ([huahe@umich.edu](mailto:huahe@umich.edu)). In terms of professional etiquette, please be mindful of the hours in which you email. I will try to respond to most emails within 24 hours during Monday – Friday workweek. **I generally do not check email after 6pm. I will not respond to emails over the weekend.** My office hours are held in-person at Angel Hall 5207, Wednesdays from 11am-1pm. You can also attend virtually—just email me beforehand so I know to join the Zoom. If we need to meet 1:1 outside of these times, we can arrange via email.

- **Technology Policy**  
Please bring your laptop to class for attendance and classwork. Do not personally record class material without instructor permission. Keep your phones hidden for the duration of the class and on silent mode.
- **COVID Policy**  
We are living in an ongoing pandemic, and our community consists of people who may have varying degrees of health vulnerabilities and concerns. While masking is not required in our class, I encourage you to wear your mask, especially if you feel you may have been exposed to COVID.
- **Accessibility and Accommodations**  
Services for Students with Disabilities, located in G-664 Haven Hall, offers services for students with documented disabilities. With or without documentation, my goal is to make your learning experience as accessible as possible. Regardless of whether or not you are registered with SSD, please let me know what I can do to maximize your learning, participation, and general access in this course. You can contact SSD at (734) 763-3000 or <http://ssd.umich.edu/>.
- **Mental Health and Wellbeing**  
Students may experience stressors that can impact both their academic experience and their personal well-being. If you are experiencing concerns, seeking help is a courageous thing to do for yourself and those who care about you. If the source of your stressors is academic, please contact me so that we can find solutions together. UM offers several confidential services that you might find helpful, including:

  - Counseling and Psychological Services (CAPS): (734) 764-8312, <https://caps.umich.edu/>
  - Sexual Assault Prevention and Awareness Center (SAPAC) 24-Hour Crisis Line: (734) 936-3333, <https://sapac.umich.edu/>
- **Academic Honesty**  
Academic honesty is a display of respect for the learning community we are creating in this course and at this university. All work submitted must be original, based on your own ideas and expressed in your own words. All material taken from other sources must have proper documentation. All cases of academic misconduct will be referred to the LSA Office of the Assistant Dean for Undergraduate Education. Being found responsible for academic misconduct will usually result in a grade sanction, in addition to any sanction from the college. For more information, including examples of behaviors that are considered academic misconduct and potential sanctions, please see <https://lsa.umich.edu/lsa/academics/academic-integrity.html>. To avoid academic dishonesty, be sure to appropriately cite someone else's words, phrases, and ideas.
- **Writing Center**  
The Sweetland Center for Writing is available to provide free writing consultation during any stage of the writing process. Sweetland provides support for all multilingual and international undergraduate students, offering a range of credit-bearing courses and sessions at their Writing Workshop and Peer Writing Center. You can find information about Sweetland's consulting services at <https://lsa.umich.edu/sweetland/>.

## SCHEDULE

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### Week 1: Who are we?

Jan 4: Wed. | Introductions  
Community Expectations  
Class Contribution Survey  
DISCO Curriculum Study (Overview)

### UNIT 1: Race as Technology

#### Week 2: How is "race" a type of technology?

Jan. 9: Mon. | Ruha Benjamin, "Introduction: The New Jim Code," *Race After Technology: Abolitionist Tools for the New Jim Code*

Jan. 11: Wed. | Roderick Ferguson, "Race," Keywords for American Cultural Studies  
Junaid Rana, "Race," Keywords for Asian American Studies

#### Week 3: How is race *imagined*?

Jan. 16: Mon. | *NO CLASS* (Martin Luther King, Jr. Day)



Jan. 18: Wed. | Toni Morrison, "Preface" and "Black Matters," from *Playing in the Dark: Whiteness and the Literary Imagination*

Anne Balsamo, "Introduction," from *Designing Culture: The Technological Imagination at Work*

### UNIT 2: World-builders

#### Week 4: How have racialized workers built the digital world?

Jan. 23: Mon. | Lisa Nakamura, "Indigenous Circuits: Navajo Women and the Racialization of Early Electronic Manufacture"

Jan. 25: Wed. | Janice Lobo Sapigao, *microchips for millions*   
Fairchild Semiconductor, Select Digitized Archival Material 

#### Week 5: "Who" or "what" is behind our digital screens? (Part 1)

Jan 30: Mon. | Tung-Hui Hu, "Laugh Out Loud," *Digital Lethargy: Dispatches from an Age of Disconnection*

Adrienne Williams, Milagros Miceli, Timnit Gebru, "The Exploited Labor Behind Artificial Intelligence,"  
<https://www.noemamag.com/the-exploited-labor-behind-artificial-intelligence/>

Selections from Yoshua Okón's *Canned Laughter* X

Feb. 1: Wed. | Ted Chiang, *The Lifecycle of Software Objects* (Part 1) X

**Week 6: "Who" or "what" is behind our digital screens? (Part 2)**

Feb. 6: Mon. | Ted Chiang, *The Lifecycle of Software Objects* (Part 2)

Feb. 8: Wed. | Sarah Roberts, "'Modern Heroes'," *Behind the Screen: Content Moderation in the Shadows of Social Media*

Feb. 10: Fri. \*\*\*ESSAY 1 DUE\*\*\*

**UNIT 3: Robots, Algorithms, and the Human**

**Week 7: How do "robots" extend longer histories of race and empire?**

Feb. 13: Mon. | David Roh, Betsy Huang, Greta Niu, "Introduction," *Techno-Orientalism: Imagining Asia in Speculative Fiction, History, and Media*

Michelle Huang, *Inhuman Figures* (video essay) \*\*In-class viewing\*\*  
<https://smithsonianapa.org/inhuman-figures/> X

Franny Choi, "Soft Science" (poem excerpts) X

Feb. 15: Wed. | Jennifer Rhee, "Dying: Drone Labor, War, and the Dehumanized," from *The Robotic Imaginary: The Human and the Price of Dehumanized Labor*

Teju Cole, "Seven short stories about drones" X

Link: <https://thenewinquiry.com/blog/seven-short-stories-about-drones/>

Context for piece: <https://directory.eliterature.org/individual-work/4873>

**Week 8: How do our surveillance cultures perpetuate racism?**

Feb. 20: Mon. | *Class Cancelled*

Feb. 22: Wed. | Simone Browne, "Notes on Surveillance Studies," from *Dark Matters: On the Surveillance of Blackness*


**Week 9: NO CLASS**

Feb. 27: Mon. | BREAK

Mar. 1: Wed. | BREAK

**Week 10: How is the "border" imagined, ordered, and contested?**

Mar. 6: Mon. | Simone Browne, "Branding Blackness: Biometric Technology and the Surveillance of Blackness," from *Dark Matters: On the Surveillance of Blackness*

Stephanie Dinkins, *Secret Garden*   
<https://secretgarden.stephaniedinkins.com/>

Mar. 8: Wed. | Ivan Char-Lopez, "Sensing Intruders: Race and the Automation of Border Control"

Alex Rivera, *Sleep Dealer (Film)* 

Mar. 10: Fri. \*\*\*ESSAY 2 DUE\*

**UNIT 4: Gaming as Race**

**Week 11: How do game worlds reproduce racial logics?**

Mar. 13: Mon. | Tara Fickle, "Introduction," *The Race Card: From Gaming Technologies to Model Minorities*

Cory Doctorow, "Anda's Game"   
(Link: [https://www.salon.com/2004/11/15/andas\\_game/](https://www.salon.com/2004/11/15/andas_game/))

Mar. 15: Wed. | Lisa Nakamura, "Feeling Good about Feeling Bad: Virtuous Virtual Reality and the Automation of Racial Empathy"

**Week 12: How do games reproduce / create dehumanized "others?"**

Mar. 20: Mon. | Chris Patterson, "Loop: Violence / Pleasure / *Far Cry*," *Open World Empire: Race, Erotics, and the Global Rise of Video Games*

Jamil Jan Kochai, "Playing Metal Gear Solid V: The Phantom Pain" 



Mar. 22: Wed. | Tara Fickle, Chris Patterson, Melos Han-Tani, Se Young Kim, Marina Kittaka, Emperatriz Ung, "Asian/American Gaming"

Class Visit to U of Michigan's Computer and Video Game Archive

Mar. 22: Wed. \*\*\*FINAL PROJECT PROPOSAL DUE\*\*\*

### Week 13: Guest Visits

Mar. 27: Mon. | Class Visit by Dr. Anne Cong-Huyen, Digital Scholarship Librarian

Mar. 29: Wed. | \* Class Visit by Professor Tara Fickle (Associate Prof., U of Oregon)

\* Prof. Fickle Lecture: "Playing like an Asian: Race, Gender, and Athleticism in Esports" (Afternoon Time TBD)

## UNIT 5: Building Our Technological Futures


### Week 14: What's at stake in our solutions? (Part 1)

Apr. 3: Mon. | Eve Tuck, "Suspending Damage: A Letter to Communities"

Final Project Consultations

Apr. 5: Wed. | Wendy H.K. Chun, "Introduction: How to Destroy the World, One Solution at a Time," *Discriminating Data: Correlation, Neighborhoods, and the New Politics of Recognition*

### Week 15: What's at stake in our solutions? (Part 2)

Apr. 10: Mon. | Lillian-Yvonne Bertram, *Travesty Generator* 

Apr. 12: Wed. | NO CLASS (Professor He will be presenting at the Society of Cinema & Media Studies Annual Conference)

### Week 16: Our Technological Imaginations

Apr. 17: Mon. | Workshop / Presentations

Apr. 19: Wed. | Workshop / Presentations

Apr. 20: Thurs. \*\*\*FINAL PROJECT DUE\*\*\*