Course Description
The rise of personalization technologies has disrupted domains ranging from political campaigns to fashion with reverberating societal consequences. People who use digital media platforms leave behind a data trail that can be used to peer into their minds and make inferences about their psychological characteristics. These inferred psychological characteristics, in-turn, can be used to dynamically customize messages to individual users at a granular scale. Personalization technologies operate with the goal of maximizing persuasive appeal of messages by creating a psychological fit between mediated content, the characteristics of individual users and the context(s) in which people are receiving the message. In this course, we will examine (1) the basic psychological mechanisms underlying personalization technologies, (2) the role played by big data and machine learning techniques in facilitating persuasion and (3) the ethical issues associated with the rise of modern-day personalization technologies. By combining a big data lens with socio-cognitive psychological research, we will understand how, why and when personalization technologies work. We will pay close attention to generative artificial intelligence technologies like ChatGPT and DALL-E in the context of facilitating persuasion. We will also spend time formulating the future of persuasion technologies while considering the broader societal repercussions that might originate from their continued widespread adoption.

Instructor Bio
Sumer’s research explores how digital media technologies can be used to study and alter psychological processes and outcomes, specifically persuasion and wellbeing. He is especially interested in a person-specific, computational and idiographic approach that examines the extent to which individual differ from each other in their response to different kinds of media. Sumer uses a variety of computational methods ranging from machine learning to dynamic structural equation modeling to inferential statistics. He is especially interested in examining dynamics between digital media use and psychological states in diverse regions of the world where technology use is growing the fastest. He is also interested in ethical and philosophical issues concerning the mind, communication processes and scientific methodology more broadly.

Hana is a co-terminal student in Management, Science, & Engineering (MS&E). For undergrad, Hana majored in Computer Science (HCI track) and minored in COMM. After graduation, she is interested in pursuing a PM role in the tech industry. Her other on-campus commitments involve being a part of the Stanford Ethiopian & Eritrean Student Association, and a former BOSP ambassador for Cape Town. In her spare time, Hana loves talking about her dog, Loza, and enjoys anything outdoors: hiking, running, longboards, etc.
**Student Resumes and Bios**
We would like to have a one-page resume (or any type of bio) from every student in the class. In addition to helping us get to know you, we will use them during conversations with panelists assigned to the topic each day (see following section on Class Panels). *Submitting a resume is a requirement of the course.* Use any format you like and feel free to just send whatever you already have completed. A single page is plenty. We’d love to know about majors, home towns, work, internships, organizations, sports, hobbies, travel – whatever you think interesting or important.

**Office Hours**
Sumer will announce weekly office hours in the first week of the class. To set-up a time to meet with him 1-on-1, email him at sumer@stanford.edu.

**Lab Session**
Each day of class, we will split our 2-hour window into (1) a lecture component and (2) a lab component. For the first hour, I will lecture about class material and the readings for that week, taking questions as I go. Then, during the second hour we will perform collaborative labs that will involve discussing and applying ideas with other students in the class. During the last 20 minutes of class, we will reconvene and each group will summarize their discussions to the rest of the class. For the labs, we will break up into small groups, different sizes for different Labs. Each group will post to a shared Google document the results of their lab activities for the day. The links for the shared Google document will be shared in-lab each week. The activities in the Lab will be based on readings and lectures. Instructions for the Labs and for submitting materials to the shared Google document will be available at the beginning of each Lab. Lab participation is required. Attendance will be taken. Students are allowed to miss 1 lab without any penalty as we will count 8 highest lab participation scores towards the final grade (out of a total of 9 lab sessions). Participation for each student will be assessed as “Great (2 pts)”, “Good (1 pts)” or “No Credit (0 pts)” for each lab.

**Readings**
All readings are available online on Canvas. Most of the readings will be previewed during the lectures, some not. We look forward to discussing the readings during the weekly class. Give us your point of view. Ask questions!

**Writing Project**
Everyone will complete one class writing project, worth 25% of the final grade. For the project, you will select a topic related to digital media and personalization. The syllabus topics are good candidates for project topics, but you may also find others. The goal of the project is to use evidence from media psychology to present a point of view about your chosen topic.

You may select one of three writing formats for the project: (1) an Op/Ed article (*a la* the *New York Times, Washington Post* or *Wall Street Journal*), (2) a policy memo for a policy maker who may be considering a media and technology issue or (3) a TED-style talk complete with a slide deck and a written narrative that you would use with the slides. Some good TED talks about media can be found here:
TED talks on social media: [https://www.ted.com/talks?topics%5B%5D=social+media](https://www.ted.com/talks?topics%5B%5D=social+media)
TED talks on media and technology:  [https://www.ted.com/search?q=media+technology](https://www.ted.com/search?q=media+technology)

The word limit is the same for each of the formats (~1,000 words). The papers are due by 5 pm on August 16. Papers will be graded based on use of media psychology to formulate a point of view, clarity of issue statements and writing, accuracy of statements, and argument about the importance of the issue you discuss.

**Exams**
There will be two exams during the term (noted in class schedule below), one for each half of the class. The exam will include several multiple-choice questions and will test the material presented during class lectures and assigned readings. Each exam should take approximately one hour to complete. You may take the exam at any time during a 12-hour window on exam day by following the exam instructions posted on Canvas. You must complete the exam at some time during the allotted time window on the scheduled day for the exam.

**Course Grading**
The final grade for the course will be calculated based on your grades on two multiple-choice exams (40%, evenly split between the two exams), writing project (25%), participation in labs (25%), submission of a one-page resume (5%) and research participation (5%).

**Honor Code**
Here is a link to the Honor Code that will be used in the course: [https://communitystandards.stanford.edu/policies-and-guidance/honor-code](https://communitystandards.stanford.edu/policies-and-guidance/honor-code)

**Well-Being, Stress Management, and Mental Health Resources**
The COVID-19 pandemic is a stressful time for us all and may be challenging for mental health. If you or someone you know is feeling overwhelmed, depressed, or is in need of support, services and support are available to help. We have highlighted three options.

Note: All the below resources are free.

1. Counseling and Psychological Services (CAPS): CAPS is the university’s counseling center dedicated to student mental health and well-being. CAPS provides a broad range of services including crisis counseling, individual therapy, medication assessment and management, and group therapy. They also offer 24/7 immediate mental health crisis assistance at 650-723-3795. Please note that CAPS services are currently only available via TeleHealth to students who are in-state due to legal restrictions. If you are out-of-state, you can call 650-723-3785 24/7 for a consultation on how to best support your needs, including finding referrals to counselors in your area. You can make an appointment at [https://vaden.stanford.edu/caps](https://vaden.stanford.edu/caps) and through the Vaden Student Portal: [https://vaden.stanford.edu/make-appointment](https://vaden.stanford.edu/make-appointment).

2. The Bridge Peer Counseling Center: The Bridge provides anonymous, confidential, and online peer counseling sessions with trained student counselors. In addition to providing emotional support, they can help you navigate other Stanford resources. They are available via Zoom during the academic school year. To connect to the Bridge or find out more, see the instructions on their website [https://web.stanford.edu/group/bridge/](https://web.stanford.edu/group/bridge/).
3. **Well-Being Coaches at Stanford:** Well-being coaches are available to offer support when you are struggling and can support your holistic wellness. To schedule an appointment, visit this website to find a coach who best suits your needs and look for available times in their schedule: [https://vaden.stanford.edu/well-being/coaching](https://vaden.stanford.edu/well-being/coaching).

**Students with Disabilities**
Students with disabilities that need accommodations in this class are encouraged to contact the Office of Accessible Education (OED) as soon as possible (i.e., during the first week of classes, barring extenuating circumstances that prohibit this) to ensure that such accommodations are implemented in a timely fashion. In general and to ensure fairness to all students, the instructors will not make accommodations for disabilities without documentation from the OED office.

**Academic Resources**
Writing and oral communication support: You can schedule free one-to-one sessions at the Hume Center for Writing & Speaking to work with trained writing consultants. They are available to help students brainstorm and get started on assignments; learn strategies for revising, editing, and proofreading; and improve organization, flow, and argumentation. You can make an appointment with a lecturer / advanced graduate student consultant, or drop-in to meet an undergraduate peer tutor. For further information about hours and locations, or to schedule an appointment, visit these sites:

*Hume* website at: [http://hume.stanford.edu](http://hume.stanford.edu)

*Academic* skills coaching: Academic Coaches are available through the Stanford Learning Program to work with students to tackle challenges such as time management, procrastination, motivation, exam preparation and anxiety, reading and note-taking strategies, and communicating effectively. You can find more information and book an appointment here: [https://studentlearning.stanford.edu/academic-skills/academic-coaching#undergradfaqs](https://studentlearning.stanford.edu/academic-skills/academic-coaching#undergradfaqs)

**Technology Resources**
The Lathrop Tech Desk offers free loaner laptops and other tech equipment to any actively enrolled students. Shipping is available for off-campus students, depending on academic need. For more information, see their website: [https://thehub.stanford.edu/check-out-equipment-and-laptops](https://thehub.stanford.edu/check-out-equipment-and-laptops). Free and Low-Cost Internet Access: The Hub at Lathrop has compiled a list of low-cost and free internet providers. You can find more information here: [https://thehub.stanford.edu/get-help-with-home-internet-access](https://thehub.stanford.edu/get-help-with-home-internet-access) For more available resources, you can visit this list compiled by Stanford students from the Basic Needs Coalition.

**Schedule**
Required readings are in **bold**. Material from required readings can be expected on the exams. Optional readings are in *italics*. It is expected that students will incorporate material from optional readings into their writing project. All readings will be made available on Canvas.

**Week 1: Introductions, Definitions & Frameworks**

June 28: Introduction to Personalization
Quick introduction and presentation of bio and resumes by each student in the class.


June 30: Interdisciplinary Origins of Personalization


Week 2: Personalization Mechanisms in Basic and Applied Settings

July 5: Basic Psychological Mechanisms of Personalization


July 7: Personalization on Social Media


Week 3: Big Data & Personalization

July 12: Machine Learning & Personalization


July 14: Generative AI and Personalization


Week 4: Idiographic Paradigms & Personalization

July 19: Idiographic vs Nomothetic


July 21:
Exam #1

Week 5: Privacy-Personalization Paradox

July 26: Privacy Implications


July 28: Ethical Issues


Week 6: Applications of Personalization

August 2: Digital Health


August 4: Marketing & Politics


Week 7: Personalization in the Metaverse

August 9: Virtual Reality


August 11: Augmented Reality


Week 8: Future of Personalization

August 16:
Wrapping Up + Final Papers Due

August 18:
Exam #2