AI for Culturally Relevant Interactions
mediaX at Stanford University Forum
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Mackenzie Room, Jen-Hsun Huang Engineering Center
475 Via Ortega Stanford, CA 94305
#AIandCulture

Our Cultures, Our Selves: Their Relevance for Humans and Artificial Agents
Hazel Rose Markus, Davis-Brack Professor in the Behavioral Sciences,
Stanford University

- Selves are socioculturally-shaped shapers of their worlds.Selves are socioculturally-shaped shapers of their worlds.
- Cultures are cycles of ideas, institutions, interactions and individuals. Selves are nodes in many intersecting culture cycles and are always multicultural.
- Understanding how people will relate to the interactive technologies of the future depends on their cultures and their selves.
- Behavior depends on the self, e.g.,
- -In the middle class West, individual preferences and choices drive behavior.
- -Outside the middle class West, norms, obligations, and expectations shape behavior.

Panel: Insights from Embodied and Non-embodied AI

Does the Supportive Partner's Identity Matter? The Effects of Chatbots vs. Humans
Annabell Ho, PhD Candidate, Department of Communication,
Stanford University

- When people talk about their feelings to a chatbot instead of another person, they can feel just as good after getting supportive responses and just as bad after getting unsupportive responses.
- But sometimes the identity of the partner does matter. We need to better understand when that's the case or not to make sure that supportive AI is safe and effective.

- AI should be built with care to provide truly validating and not invalidating responses, since invalidating responses can be harmful even if people know the partner is a computer who doesn't "know any better".
- AI should be built with careful thought about how it would impact the person's relationships (with other people around them and with the AI itself).

Creating AI Personalities
Mariana Lin, Consultant, Character Designer for Sophia,
Hanson Robotics

- In crafting AI personalities, we have an opportunity to look at human culture and identity from a new perspective. What would an alien being think of the way humans categorize and organize ourselves?
- Embodied AI needs to take more visual care in being broadly culturally appealing and address / challenge biases. The more anthropomorphic the AI is, the more this is both a concern and opportunity.
- Emotions are a way to bridge differences across cultures in AI interactions. They underlie the unifying human experience.

Long Term Health Coaching Relationships
Cory Kidd, Founder & CEO, Catalia Health

- We start with what a doctor or nurse might ask a patient about or inform them of and build conversations from there. Using both doctors and nurses is helpful because each has a different relationship with a patient.
- Using humor in a healthcare discussion is very controversial -- just ask some of our customers who hate the idea! -- but we think it's important.
- We created an identity for Mabu that somewhat relies on existing constructs of health caregivers, but also somewhat different. There are benefits and detriments to each of those.

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Making Robots Sociable
John Ostrem, Co-founder & CEO, AvatarMind

- What is a social robot?
- The iPal is a humanoid robot.
- What is needed to make robots fit into society in such a way that they can interact effectively with people and be accepted as part of everyday life?

Lightening Talks: Expressions of Culture and Identity –Language, Images, Perception

Crazy Like Us
Ethan Watters, Author

- It turns out that how a people in a culture think about mental illnesses—how they categorize and prioritize the symptoms, attempt to heal them, and set expectations for their course and outcome—influences the diseases themselves. In teaching the rest of the world to think like us, we have been, for better and worse, homogenizing the way the world goes mad.
- Researchers have amassed an impressive body of evidence suggesting that mental illnesses have never been the same the world over (either in prevalence or in form) but are inevitably sparked and shaped by the ethos of particular times and places. As AI becomes a diagnostic tool for psychiatry, these cultural differences need to be taken into account.
- The cultural shaping of the human mind goes beyond mental health symptoms. Researchers have begun reveal wide cultural differences almost everywhere they look: in spatial reasoning, the way we infer the motivations of others, categorization, moral reasoning, the boundaries between the self, others and our deeply held beliefs about the nature of the self, among other aspects of our psychological makeup. Understanding the cultural impact on human cognition will become increasingly important as we train computer systems to mimic human reasoning, thought processes and intuition.

Inviting "We The People" To AI
Davar Ardalan, Founder & Storyteller in Chief, IVOW

- In 2017, some 850 stories in the Washington Post were produced by machines and not human journalists. Automated news is here and getting stronger.
- What is Deeply Inclusive AI (DiAi) and how can it create a more inclusive and ethical society as we rapidly move towards automated intelligent storytelling?
- While, Deeply Inclusive AI (DiAi) falls in the Beneficial AI category, we argue that it also makes for sound business strategy as industries better understand each of their customer's needs and motivations.
- A deeper understanding of every customer's personal story and cultural background is vital for competing in a marketplace increasingly dominated by Artificial Intelligence. It will take collaboration across industries to make DiAi a reality.

Considering the Analog World of Emergent A.I.
Antero Garcia, Assistant Professor, Stanford Graduate School of Education

- Algorithms and AI are authored texts; they are written by individuals and carry with them implicit values, biases, and ideologies.
- How we adopt new technologies is a process of learning. These devices teach us as we use them.
- When we talk broadly of cultural relevance, we need to be mindful of whose culture is counted and what we mean by "relevance".
- Related to point 3, our vocabulary when discussing technology needs to be challenged: what does it mean to "adopt" new technologies? What does "humanizing" mean in today's software world?

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AI-Powered Interactive Media: The Verge of a New Era

Albert Boyang Li, Senior Research Scientist, Baidu Research

- The way viewers interact with TV shows and movies has changed little in the past 60 years or so.
- Automatic understanding of video and story content would enable new interaction paradigms, such as intelligent fast-forwarding with summarization.
- New algorithms can compute the versatility of actors and their similarity from metadata (paper submitted to AAAI 2018).
- New algorithms can align video and textual data, which are abundant in the traditional production process but could not be jointly understood (paper published at CVPR 2018).

The Politics of Algorithms

Angèle Christin, Assistant Professor, Department of Communication, Stanford University

- Algorithms may seem more objective and rational than human beings, but they always involve multiple political choices.
- Algorithms can reproduce and even reinforce social, racial, and economic inequalities.
- We need to pay close attention to how algorithms are constructed, implemented, and used in the social world.

Culture on Demand

Jordanne Pavao, Product Manager, Flybits

- Enterprises seek to deliver sophisticated customer experiences that leverage contextual data to become micro-personalized.
- Capabilities exist to apply AI to the creation and advancement of predictive models. The Engine also leverages AI and machine learning to provide recommendations in order to refine or augment a experience.
- AI will change the way companies operate in the future. We are only just scratching the surface of what will become possible.

Fireside Chat:
Translating Code in Culture for Brand Meaning

Elodie Storm, Senior Director, Strategic Development, Getty Images
Andrea Gagliano, Data Scientist, Visual Intelligence, Getty Images

- AI helps scale rather than automate creative tasks.
- AI enhances curation with inspiration.
- Building culturally aware AI in the creative field stems from collaboration.

Workshop Activities

Write your insights here

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Dealing with Errors, Fairness, Explainability and Testing of Machine Learnt Models

Rama Akkiraju, Director, Distinguished Engineer, Master Inventor, IBM's Watson Division

- AI Models rarely get it right in first iteration. Plan for continuous improvement.
- Be diligent with Error Analysis and fix the ones that matter, if you can't fix them all with your resources.
- Feel free to declare your biases in training data, that way users know what they are getting.
- Must you build opaque statistical deep-learning models and try to explain their predictions after-the-fact? or should you build transparent models that might take time and effort but are explainable from the get-go?
- Humans are an integral part of building AI models. Their personalities, their background all make their way into AI models via labeling, data selection, data source identification, feature selection etc.

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The practical and responsible limits of artificial intelligence are still in their early stages of development.

A better understanding of the relationship between identity, culture and AI technologies can lead to dramatic improvements in how consumers, students and patients relate to information and to content, devices and services.

This mediaX Forum convenes academia and industry thought leaders in the emerging arena of cultural and societal interactions with big data, machine learning and artificial intelligence.

Our goal is to move the human-AI relationship forward by bringing industry trailblazers together with Stanford cross-disciplinary thought leadership to examine and evolve concepts, technologies and practice used to integrate culture and identity with artificial intelligence and robots.

Questions to be considered:
What cultural issues and concerns are critical for AI applications?
How will consumers' relationships to brands be shaped by culture in AI storytelling?
How does culture influence perception of human rights and privileges in the digital world?
How can traditions, histories, and collective experiences shape an individual's experience of AI products?
What elements of human culture can be emulated by artificially intelligent entities, particularly in a world of such varied human experiences?

This Forum is made possible by mediaX members and special contributions from: IVOW, Flybits and Baidu Inc.

Find further information from speakers at:
http://bit.ly/aiandculture
Give us your feedback on Twitter with **#AIandCulture**

mediaX at Stanford University is the affiliate program of the H-STAR Institute extending from the Stanford Graduate School of Education to over two dozen interdisciplinary labs at Stanford. mediaX brings innovative companies and researchers together to explore thoughtful uses of information technology across the industries of tomorrow.

mediaX initiates research through strategic partnerships with our members which typically investigate how the relationship between people, media and technology can be enhanced, augmented and improved.

The various mediaX membership programs provide regular opportunities for people from high-impact companies to get acquainted and interact with Stanford University researchers.

mediaX takes its strength from Stanford's thought leadership—the faculty, students, courses, and the research programs that receive support from federal agencies and private foundations. At Stanford, we are able to go deeper and wider than is practical for most companies.

The combination of Silicon Valley's entrepreneurial culture, actively engaged industry partners, Stanford thought leadership, and the energetic creativity of bright, motivated graduate students infuses mediaX activities with unique opportunities to capitalize on the full intellectual, technological and cultural resources at Stanford University.

We hope to see you again soon at another mediaX event.

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