

What we learned from making “AI & Me”, an interactive AI installation tried out by 2000 people

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Abstract

In the contemporary artistic landscape, the intersection of art, artificial intelligence, and human interaction presents a fertile ground for exploration. Our installation, "AI & Me," serves as a case study in examining this nexus. The work probes the boundaries of AI's role in art, its impact on human perception, and the evolving narrative of technology in modern society. This paper discusses the conceptualization, execution, and reception of "AI & Me," reflecting on the broader implications for art-science-technology collaborations.

Keywords

artificial intelligence, human perception, art-science, art installation, interactive AI art

Introduction

In the ever-evolving landscape of art and technology, the "AI & Me" multipiece installation stands as a groundbreaking exploration into the realms of artificial intelligence and its interaction with human subjects. This piece, shown at two art festivals and one private event in Germany, and engaging over 2000 participants, marks a significant point in understanding the complex relationship between AI and human perception, challenges our comfort with technological judgment but also provokes thought on the broader implications of AI in our lives.

'AI & Me' has evolved from a simple display of how artificial intelligence perceives us into a deeper exploration of our comfort with AI's judgment.

This interactive artwork dynamically grows in real time, shaped and informed by the interactions of its participants. It uncovers the fascinating extent to which we are willing to allow a machine to analyze and critique our appearance, all to satisfy our curiosity about its thoughts on us.

Central to this experience is 'The Confessional,' a candid machine that delivers an opinion about individuals based on their outward appearance, designed to provoke and challenge our relationship with artificial judgment. (see Figure 1 below).



Figure 1. Installation view of “The Confessional” (2023) by mots
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The other two main components of the installation are “AI Ego” - a piece composed of a series of CRT monitors displaying the participants who enter “The Confessional” in surreal and completely fabricated scenarios, imagined and generated by AI and “Siblings” - a gathering of AI-generated siblings on vibrant screens, questioning uniqueness and human significance in the age of AI replication. Accompanying pieces like “Profiled by AI,” which shows the questions and answers the AI uses to profile a person, or “Seen by AI” further expand this narrative.

Background

Our first project that had AI at the center was “Latent Space”, an art-science collaboration that resulted in a short film and installation. We were lucky to collaborate on this with a team led by neuroscientist Zachary Mainen (Champalimaud Foundation) and shortly understood what AI is capable of. Our main task was to creatively direct the project, but also to focus on the production of the short film, which we wrote, made, and post-produced with all the available AI technologies we had at our disposal - this was roughly between October 2022 and January 2023, so

AI tech was still really experimental at that point, and not so widely accessible for everyone.

The experiment was to see how much we can use AI throughout the process without making a fool of ourselves. It was mindblowing to see that things that would've taken us days or weeks, we solved using AI in only a few hours, with limited technical knowledge, and with results as good (or even better) than using traditional methods. Since then, we learned more and more how to find algorithms and models that we need for our work, how to train AI models, and how to make them work together without breaking apart.

Technical approach

With all these free and even open-source AI models available all over the Internet, the biggest challenge from the technical point of view is to make them work together seamlessly and in real time. This often requires an infrastructure that is stable enough to allow fast computation which is usually done in the cloud. So a big part of the work is also to code AI infrastructure, systems that are not really available in an art supply shop, but rather on startup or engineering forums or communities which tend to get very technical after the first 5 words of a post.

One of the main things that we're trying to figure out by working with AI is how much are we, humans, willing to let machines take control. Sure, we've gotten used to and basically ignore social media algorithms by now, but the main thing of this next decade is probably going to be this very clear symbiosis between our knowledge and artificial knowledge. Of course, we as humans are always biased by our knowledge, upbringing, the social norms we grew up with, the education we received, and so on, and it's impossible to not see and act while wearing a lens that will always be subjective. But what happens when artificial intelligence - which is, so far, just a remix of all human biases - becomes the lens through which we do most things because it's simply easier or faster? Do we all become the stereotypes that AI will assign to us? For example, if we write code, screenplays, or essays with the help of AI, are we all unwillingly aiming toward the same direction instead of embracing individuality and uniqueness? You can already see this happening on social media. There are still amazing works to be made with the help of AI, but how much of the work is us, the creators, and how much of it is AI, the tool that is generating average completions based on its programming?

Most of our ideas become instant obsessions, moments after they come into existence. In the case of "AI and Me", I think we were thinking about how natural it is for us humans to judge others simply on their appearance. Based on that, we realized that AI might also be able to form an opinion. But, unlike us humans, AI can be programmed to be completely honest about what it "sees" and simply spill the first thing it comes to its artificial brain.

In some way, "The Confessional" made a lot of sense as a name for the initial piece of the installation, as a symbol for a place where you're being judged based solely on your appearance and what you might have done in your life.

Without getting too much into technical details, in the algorithm that we designed, the machine first tries to figure

out some basics about the person in front of it, then tries to answer around 30-40 questions about that person. These questions are quite diverse, from simple "What is the age of the person?" to silly "Is this person balding?", from descriptive "What is the color of the person's hair?" to biased "Is this person a criminal?". Again, the only information that the machine is getting is image data of the person inside "The Confessional." We're using these questions to try to increase the machine's attention towards things that we humans often probably think about.

This original assessment is then taken into consideration by a more intelligent AI which takes another glance at the person to better study their looks and behavior so that it can finally give its brutally honest opinion about what it sees. Then, if the machine "likes" the person well enough, it sends their profile to other pieces of the installation (see Figure 2 and Figure 3 below).



Figure 2. Installation view of "AI Ego" (2023) by mots
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Figure 3. Installation view of "Siblings" (2023) by mots
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We tried to take great care in making the experience as immersive as possible, but we also wanted to make sure that people understood the meta-commentary we're trying to make with the project. A lot of the tweaks we made during the exhibits, besides constantly solving infrastructure problems, had mostly to do with the tone and the language used by the machine. Since the machine is looking at the person that sits down in front of it, it's

important that the interaction is as natural as possible and that the participants are not steering away too much from their natural selves. Also, the fact that we had exhibits at events of different types helped us experiment a lot with how machine perception changes in the face of diverse human types and interactions.

Reception and Impact

As we were putting together the code for the installation, we were wondering if people would want to try it out or if they would refuse due to privacy concerns. We were worried that this might feel like an experimental artwork gone too far and that participants might be reluctant to be evaluated by an AI that they know nothing about. The machine ultimately takes peoples' images and uses them to generate stories and alters them in various ways. We even prepared a printed summary of the process to tame people's doubts. But the majority of them didn't care, nor did they read that their image was being processed by the machine.

To our surprise, the response was much more different than we expected and what we witnessed at the first showing of the installation was quite surprising. People were starting to queue in front of the installation to see what the machine's impression about them might be. They were taking pictures of their friends as the AI was observing them. The reactions were fascinating. The name assigned to them by the machine brought smiles to their faces. They felt flattered when the AI told them it was dreaming of them. A text summarizing their emotions left them puzzled but could not help but identify slightly with what the AI was saying, and when they saw the machine's portrayal of them, they some even instinctively reached up to touch their faces. It became a social event, a show for those just watching their friends being judged by the machine. But it was like we uncovered a universal truth: we're all a bit narcissistic, and absurdly curious about what a bundle of code might gossip about our existential being. People want to be seen. There is this underlying need to be liked, to be acknowledged, that makes technicalities like data privacy seem completely unimportant.

So, in contrast to our initial anticipation, people were not afraid at all to let the machine state its opinion about them, and more so, some even sat in front of the camera a few times in a row, trying to trick the machine with a different hairstyle, no eyeglasses, less clothes, to receive a more flattering description, or even a nice compliment, as opposed to the initial honest reaction the machine was showing on the screen. Unfortunately for them, the machine showed no signs of wanting to be tricked and most often, the people would end up being rudely criticized even harshly by the AI, without any consideration for their feelings - yet still, not a good enough reason to hate the machine, but rather a downer for one's ego. A few were trying to find a deeper, spiritual meaning to whatever AI was trying to communicate about them. It was impressive to notice how an AI can get under the skin of humans just by mastering their language, "language - the operating system of humanity", as philosopher and historian Yuval Harari once said. [1]

This led us to think, is it easier to accept honest remarks coming from a cold machine than from a human? Were people lining up for our machine thinking they were in for a treat? Maybe the real draw was the anticipation of what the AI would say, whether it'd be a compliment or a cheeky jab. It's kind of funny how some people find it amusing to be turned into a bunch of data points for an AI to analyze. Maybe it's just intriguing enough for them to want to see what this new, smart tech has to say about them. Or did the machine really find a way to hack into our "operating systems" through intelligent use of language that plays with the deepest fears regarding our self-image?

This experience showed us how much humans are interested in how they see themselves, especially when faced with the unemotional analysis of a machine. When people read direct and honest comments from the AI without any sugar coating, it shocks them in a new way. It makes them feel a mix of surprise, being upset, and thinking deeply about themselves.

One of the participants said that it all starts like a fun game, and you're waiting curiously to see if the machine has some cool information about you. The machine told her that she had a sad face and there was darkness coming out of her. At first, she laughed, but then she felt sick because she knows herself and felt that her personal space was invaded. [2] Another participant confessed that when the machine was describing him, it felt like it saw only the negative parts of his physique, or that those were the ones standing out more. [3]

The fact that people were so open about exposing themselves freely to the machine, did make us question whether this openness to technology is a part of modern society, or has something to do with our indifference towards being consciously judged. To phrase it differently: is this shift towards lack of privacy or personal boundaries something that we adapted recently, or are we as humans willing to do whatever it takes to know the opinion of others about ourselves, even if that other is a machine?

Conclusion

The diverse components of the "AI and Me" installation, not only provided a platform for personal reflection but also helped in understanding the evolving dynamics between humans and technology. The reception of the installation has opened new perspectives for collaboration with technology. It exemplifies how AI in art can be utilized not just for aesthetic purposes but also as a tool for scientific inquiry and social commentary.

We believe that AI's impact on art is not very different from other technologies we've seen in the past: from painting to photography, from shooting film to digital cameras, from piano to synthesizers. Its impact is of course much faster and will be more visible.

The way AI interprets and reimagines human participants in different scenarios offers insights into the growing influence of AI in our lives. This interaction leads to questions about the extent to which we are willing to let AI influence our perception of ourselves and others. It highlights the fine line between utilizing AI as a tool for exploration and the risk of becoming overly reliant or

influenced by its judgments and interpretations. This understanding is crucial in a time when AI is becoming increasingly integrated into our daily lives, affecting our decisions, interactions, and self-perception. It's not just selling us stuff anymore, but it's starting to have a say in everything from politics to what we believe. It no longer just informs but has the potential to invent our very reality.

Interactive AI art is a powerful medium for encouraging introspection, highlighting societal biases, and exploring the complex relationship between humans and AI. It can enhance our understanding of ourselves in a world where technological evolution doesn't show any signs of slowing down. As artists, it gives us a chance to bridge the gap in public knowledge, because it raises curiosity, starts conversations, and can make us aware of the fact that even if a system is complicated, it doesn't mean we will never understand it or be able to change it, thus making us more at ease with AI being a part of our everyday lives.

References

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Participants feedback gathered by the artists, mots

[2] Kathrin S., after the experience at "BSeite Festival", Mannheim, Germany, December 2023

[3] Jonas M., after the experience at "BSeite Festival", Mannheim, Germany, December 2023

Author(s) Biography(ies)

Daniela Nedovescu and Octavian Mot, collectively known as mots, are two Romanian filmmakers and transdisciplinary artists working together for over a decade and currently residing in Germany. They write and produce a variety of creative projects, ranging from multimedia installations to web series and films exploring the irony of human behavior.