

# PhD grad reframes media research through a computer science lens

**The GAME School doctoral student and Fulbright grant recipient bridges humanities and tech while studying cinema and cognition**

By Lisa Rolland, ASU News  
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**Editor's note:** This story is part of a series of profiles of notable [spring 2026 graduates](#).

Lein De Leon Yong had no intention of exploring AI and computer science when she was first searching for a doctoral film studies program. That all changed while De Leon Yong was interviewing for the PhD program in media arts and sciences at Arizona State University.

Originally from Mexico City, De Leon Yong received funding from the [Fulbright-García Robles Scholarship](#) to further her research in cognitive film theory — an academic framework that arose in the 1980s seeking to understand how the human mind responds to film through theories of perception, information processing and interpretation.

A casual comment by the interviewer inspired De Leon Yong, who has a bachelor's degree in art history and a master's degree in filmmaking, to shift her entire research approach.

"I've always been an advocate of cognitive film theory, because I think, 'That's it!' It better explains how we understand movies and TV advertisements, etc.," De Leon Yong said. "And then, when I was getting interviewed for this program, the person who did the interview explained to me that AI tries to emulate our cognition. And I made the connection, like, 'Oh, so then there must be some points of relationship.'"

That "aha" moment led De Leon Yong to push significantly out of her comfort zone and lean into the interdisciplinary nature of her degree program by approaching her research in cognitive film theory through a computational lens instead of a traditional media studies one. Now, five years later, De Leon Yong is graduating in spring 2026 with her PhD in media arts and sciences from [The GAME School](#), housed in ASU's [Herberger Institute for Design and the Arts](#).

Her dissertation, titled "Cognition, Computation, and Cinema. Tracing an Interdisciplinary Bridge to Test the Use of Computational Vision Tools in Film Studies," bridges seemingly unrelated topics, but De Leon Yong points out they both have a lot to do with the computational theory of mind, which views the mind itself as a computing machine and inspired the creation of machines that

emulate human mental processes.

So what does that have to do with cinema? “We don't learn how to watch movies, cinema,” De Leon Yong said. “We understand cinema through our innate cognitive skills, which are the same skills the computational theory of mind tries to understand as a series of distinct steps and a system. So, yeah, there's a connection!”

“I've always been on the arts and humanities side. And (this program) has changed my mind absolutely, like, the way I see almost everything ... understanding how computers work, how AI works especially. I think that was the most important, getting a comprehension of what actually is AI — that it is a statistical product — instead of believing that it is just some sort of magic.”

When asked why she chose to attend ASU, she emphasized the interdisciplinary nature of the university. It wasn't her original plan, but as De Leon Yong put it, “This AI thing called to me. It's been really difficult to understand, and I know things would have gone more smoothly in the original PhD program, but yeah, it got my attention. It piqued my interest, my curiosity, and I thought that I could make something really different.”

From battling two rounds of COVID-19 and breaking her elbow in her first semester in 2021 to learning to use AI models for saliency mapping of early cinema editing styles and defending her dissertation, she said it's been a long and complicated but rewarding road.

Her research on how cinematic style decisions shape human attention, emotion and narrative engagement has transformed De Leon Yong's understanding of technology while advancing media scholarship.

After graduation, De Leon Yong plans to seek postdoctoral research opportunities in Mexico, though she is open to returning to the filmmaking sphere to freelance in film editing until she finds the right academic home.

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## Main image



Lein De Leon Yong, courtesy photo