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Critique through Exploration: Critical AI Studies

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Abstract

As universities rapidly integrate AI into educational infrastructure, this paper proposes a pedagogical framework for critical engagement with generative AI as a media form. Rather than treating AI as a ready-made tool, the assignment positions model building as a site for aesthetic, ethical, and political inquiry. Students work in groups to curate datasets and train simple image generation models using accessible, cloud-based tools, then write critical reflection papers connecting their hands-on experience to broader theoretical frameworks from media studies. By pairing technical literacy with sustained critical analysis, this assignment demonstrates how undergraduate students in the arts and humanities can develop sophisticated understandings of AI systems as both cultural artifacts and computational infrastructures. The paper includes a detailed demonstration of a final project: a StyleGAN3 model trained on photographs from San Francisco's Golden Gate Park that models the assignment's pedagogical arc and shows how dataset construction embodies human decisions of framing and exclusion.

In early February of 2025, the California State University system, the largest four-year public university system in the United States, announced its CSU AI Initiative, a broad partnership with OpenAI. Providing AI tools and training to more than 460,000 students and 63,000 faculty and staff, the initiative was touted as a way to prepare students for an increasingly "AI-driven workforce" (DiPierro, 2025). While the CSU's announcement centered on innovation and workforce readiness, its tone reflects a growing momentum across higher education, as universities from Northeastern (Solis, 2025) to the University of Nevada, Reno (Downs, 2025) have launched their own AI efforts. This increasingly widespread adoption highlights a broader trend in higher education, one that indicates that universities are promoting AI as an infrastructural partner in the process of education and the production of knowledge.

Yet, for all their emphasis on these initiatives being forward thinking, these projects rarely foreground a critical engagement with AI as a media form. Privileging an understanding such as this would enable students to more critically separate the buzzwords and marketing campaigns that currently surround the technology from its more real world impacts. Conceptualizing AI as a media form means thinking through the ways it can inscribe specific political and cultural choices into the infrastructures it becomes embedded within. It means thinking through the material conditions that favor the integration of AI into our systems of higher education. For instance, how does this technology result from or encourage certain orientations to computational infrastructures? How do these systems rely upon certain forms of dispersed global labor and trade, or, to center a questions about student experiences, how do these reliances speak to the position of students as they participate in higher education in the contemporary moment. After all,

examining AI as a kind of media requires a consideration for the way that it situates its users within the greater contexts of the technology's creation and uses.

Course Design and Assignment Overview

This project is meant to center this understanding of AI by outlining a final assignment for an undergraduate potential course in Critical AI Studies. Designed for students in the Arts and Humanities, this course approaches generative AI as a media practice to be interrogated through theory, practice and aesthetics. To guide this engagement, the course is structured around three interconnected components: weekly readings in media theory and related fields, low stakes creative exploration of generative AI tools, and a final collaborative model training project. These components are meant to come together to develop students' understanding of AI as both an infrastructural and cultural system, as well as to raise their awareness of the vast resources and processes used to produce individual models.

The focus of this paper, and the culmination of the course, is a collaborative final assignment in which students split into groups of three to four to build their own simple image generation model using a pre-figured Google Colab notebook with StyleGAN3, NVIDIA's open-source generative adversarial network. Google Colab is a cloud-based platform that enables users to write and execute code on Google's cloud services, giving them access to the company's vast computational infrastructure without needing high-powered personal hardware to do so. This accessibility is central to the project design: Colab provides free or low-cost access to GPU resources, while the open-source nature of StyleGAN3 guarantees that students will not be required to pay for tools or licenses. By providing prewritten notebooks containing necessary code, environment settings, and training workflows, students without prior coding experience can still participate fully in the assignment. Beyond accessibility, however, Colab itself becomes a pedagogical tool: the platform serves as the connection through which students directly engage with the computational infrastructure required for model training. This connection to Google's infrastructure positions students within the material components of model training, becoming a tangible way for them to connect model building to larger questions surrounding engagement with AI systems.

Each group begins by selecting an aesthetic theme for their model, such as an image generator intended to generate images of red flowers. Requiring students to treat their process of data collection and production as an aesthetic practice is a deliberate way of making them consider the acts of framing and exclusion that impact the process of model training that start with the production of data. Once an aesthetic theme is chosen, they will then be tasked with producing and curating a dataset that aligns with their theme. Throughout the process, each group will maintain detailed documentation of their work, including how they produced and curated their dataset, the rationale behind their choices during training, and the challenges they encountered along the way. In addition, groups will be expected to provide samples of their datasets and model outputs as part of their final submission. The emphasis here is not on producing a technically successful model but on making visible the interpretive, situated decisions that shape model building as a media practice.

After completing the collaborative portion, each student will independently write a 10-12 page critical reflection paper. They will be prompted to connect their practical experience of model construction to the broader themes explored in their weekly readings from the semester. Drawing from at least two authors, they may for instance analyze the role of datasets as a cultural artifact, reflect on the labor required to produce data, think through the global computational infrastructures invoked in model training, or discuss the aesthetic transformation that datasets undergo through the training process. By pairing hands-on experimentation with focused reflection, the assignment aims to help students develop a simple technical literacy around generative AI, as well as the capacity for critical analysis of the technology. The hope for the project is to demonstrate to students that producing generative AI is an aesthetic, ethical, and political media practice.

Assignment Demonstration

To demonstrate how this project could be achieved, I curated and trained a generative model aligned to a specific aesthetic theme. The dataset consisted of 2,200 images taken on a Fujifilm S-X20 camera during a walk through San Francisco's Golden Gate Park on August 3, 2025, between 1:30 p.m. and 4:45 p.m. These temporal and geographic constraints functioned as deliberate aesthetic parameters, meant to emphasize how varying constraints can work to im-

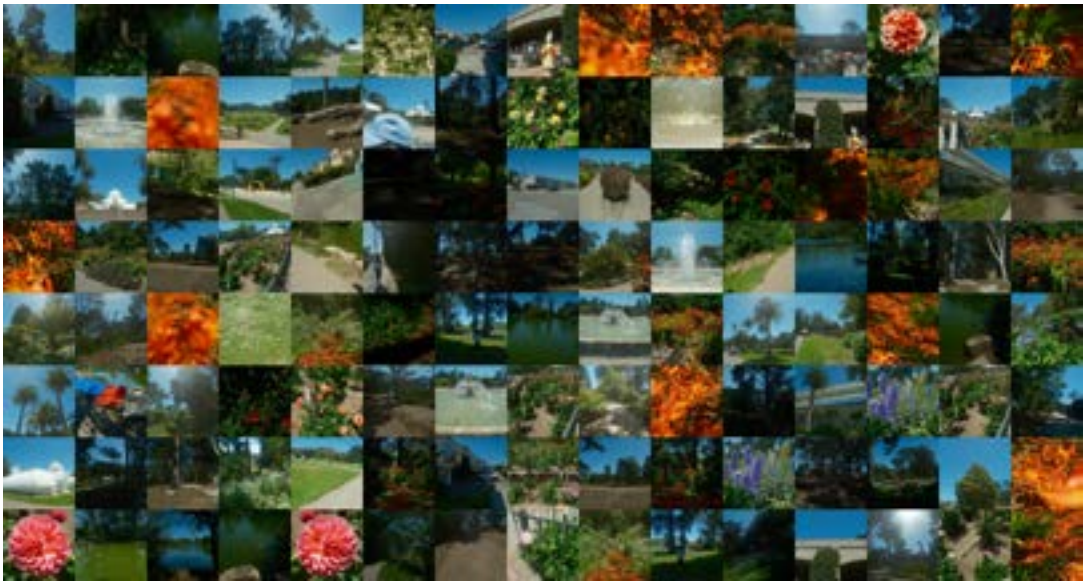

Figure 1
A random sampling of the 2,200 images that comprised the sample project's training data. All images taken in San Francisco's Golden Gate Park on August 3, 2025

pact the process. Using this dataset, I trained a StyleGAN3 model, NVIDIA's open-source generative adversarial network, on Google Colab with A100 GPUs.

This example demonstration based on the images of Golden Gate Park utilized a Google Colab notebook, and this same notebook will serve as the template of code that will be given to students. Using the pre-written code ensures that those students without prior programming experience will be able to engage fully with the assignment, focusing their energy on the critical, aesthetic, and reflective dimensions of the project rather than on the technical side. Through structuring the process in this way, the assignment is meant to foreground the practice and labor necessary to construct a model while still exposing students in the arts and humanities to the procedural steps of dataset curation and model training that is normally only accessible in more technical settings.

In my own demo model, this approach enabled a close look at how the model's outputs related to the curated dataset's aesthetic parameters. The generated images reflected and reconfigured the Golden Gate Park's visual textures: repeated structures, tonal ranges, and color palettes emerged that echoed the park's distinctive environment while abstracting it through the model's representational logic. Because students will receive a streamlined technical setup, they will be able to attend more closely to these types of transformations between data and output.

In this way, the demonstration serves as a practical conclusion for a course on Critical AI Studies, modeling both the procedural steps of dataset curation and model training with the critical analysis of aesthetic outputs. Students begin by working concretely with data through the process of curating and producing their own datasets, then move through the training process and toward examining how their outputs embody, distort, or abstract their original themes. This progression is meant to reflect the arc of the course, going from hands-on engagement with AI's material processes to situated, theoretical reflection on AI as a cultural and media form. The use of accessible, cloud-based, open-source tools ensures that this critical trajectory is available to students across a range of backgrounds.

Pedagogically, this assignment draws on traditions of critical making and practice-based research, in which theoretical inquiry is interwoven with more hands-on experimentation. The demonstration offers students a concrete model for how to situate aesthetic and technical practices within broader cultural and infrastructural contexts, encouraging them to see their datasets not merely as raw material but as artifacts produced through specific human and technical choices.

Additionally, this approach is innovative in the way it integrates accessible technical workflows with critical and aesthetic analysis, repositioning the construction of generative AI as a site for investigation. It is intended for undergraduate students in the arts and humanities, who often bring strong interpretive capacities but have had limited exposure to the computational infrastructures shaping contemporary media. The assignment is structured to guide students through a progression of intellectual work: they begin by applying technical workflows to curate and train

Figure 2
A random sampling of images generated from the StyleGAN 3 model after training continuously for 48 hours.

their datasets; move on to analyzing how their model outputs relate to the aesthetic parameters they established; and ultimately evaluate and contextualize their findings through theoretical frameworks from the course. By pairing hands-on model training with critical reflection, the assignment provides these students with both technical literacy and the tools to interrogate AI systems as cultural texts and technological infrastructures.

In the broader educational landscape, where institutions are rapidly adopting AI, this assignment offers a critical alternative. Rather than treating generative AI as a ready-made tool to be passively used, it positions the technology as something to be built, examined, and questioned. By walking students through the process of constructing and analyzing their own models, the assignment resists the tendency toward blanket adoption and instead is meant to cultivate active forms of learning that help students think critically about AI initiatives in higher education. In doing so, it models a pedagogy that foregrounds inquiry and critique, better preparing students to engage with AI as a cultural and infrastructural forces.

References

DiPierro, A. (2025, February 4). Cal State unveils artificial intelligence tools for students. EdSource. https://edsource.org/2025/cal-state-unveils-artificial-intelligence-tools-for-students/726205

Downs, M. (2025, August 13). University of Nevada, Reno launches artificial intelligence initiative, PACK AI. Nevada Today. https://www.unr.edu/nevada-today/news/2025/pack-ai-launch

Solis, S. (2025, April 3). Northeastern University joins AI-higher ed experiment. Axios. https://www.axios.com/local/boston/2025/04/03/northeastern-ai-claude-partnership?utm_source=chatgpt.com

Michael Hoye is a graduate teaching assistant at San Francisco State University, where he recently completed his MA in Media Studies with a graduate certificate in Ethical AI. His research examines deep learning systems as symbolic forms and thinks about the construction of latent spaces as political projects with recent work presented at the 2025 Ethics and Aesthetics of Artificial Images conference hosted by the IUAV University of Venice and the 2025 AEJMC annual conference.

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