

INSIGHTS
2024

powered by **SCADask**

SCAD is a private, nonprofit, accredited university, offering 100 graduate and undergraduate degree programs across locations in Atlanta and Savannah, Georgia; Lacoste, France; and online via SCADnow. SCAD enrolls more than 17,500 undergraduate and graduate students from more than 120 countries. The future-minded SCAD curriculum engages professional-level technology and myriad advanced learning resources, affording students opportunities for internships, professional certifications, and real-world assignments with corporate partners through SCADpro, the university's renowned research lab and prototype generator. SCAD has earned top rankings for degree programs in interior design, architecture, film, fashion, digital media, and more. Career success is woven into every fiber of the university, resulting in a superior alumni employment rate. A 2023 study found that 99% of SCAD graduates were employed, pursuing further education, or both within 10 months of graduation. SCAD provides students and alumni with ongoing career support through personal coaching, alumni programs, a professional presentation studio, and more.

For more information, visit scad.edu.


Cover image created using Leonardo.Ai and Adobe Firefly.

Prompts:

Leonardo.Ai — Illustrated female side portrait, chin up, off-white background, achromatic dark figure, multiple colorful paint splatters.

Adobe Firefly — Colorful paint splatters and women's collared shirt, grayscale.

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Science fiction setting called “Neo York” for use in a Fortnite metaverse experience.

Malcolm Chan, B.F.A. illustration.


Work created using Midjourney.

Prompt: Create a stylized cyberpunk skyline of a near-future New York.



“Just like the Web days,
AI is open, inviting
anybody to come in and
take part. It’s the best
time if you care about
creativity. **This is a time
for visionaries.**”

— **Fred Gilbert**, VP, Head of User Experience,
Google Workspace at Google



Be Collaborative:

The Inaugural SCAD AI Summit

Since 1978 SCAD has consistently adopted technologies to ensure students have the tools necessary to launch their creative professions. SCAD's technology-forward curriculum began with the university's first computer art degree program in the '90s and has evolved to include 28 STEM-designated majors today. AI, an invention that augments and amplifies human productivity, is the next chapter in SCAD's legacy of innovation. According to President Paula Wallace, AI offers the university a "once in a lifetime opportunity to spur revolutionary thinking."

**This is the best time in
human history to be a creative.**

Periods of transition and monumental change invite trepidation and existential questions. These questions of what it means to be alive, to be human, drive the spirit of invention while preserving integrity and dignity. AI removes "busy work" to make space for

ideation suffused with what makes us human: curiosity, empathy, and intuition. As automation expands and algorithms fill the empty space around us, AI will become omnipresent. Creatives must help ensure that ubiquity does not become complacency — to be more than just humans-in-the-loop. They must lead the way forward as dreamers and makers.

Prior to the AI Summit, SCADask administered a survey to creative business leaders that resulted in an impressive 35% response rate. 60 leaders shared observations about AI's impact on their design processes and industries, their expectations of AI literacy from incoming designers, the future of AI in their fields, and more. Their insights are highlighted throughout this report.

90%

predict AI will drive significant innovation in design, pushing the boundaries of what is currently possible.



Pop-up book page for Van Cleef & Arpels.

Tanya Li, M.A., luxury and fashion management, 2024; M.F.A., fibers, 2022; B.F.A., fashion, 2020.

Work created using Midjourney.

Prompt: Pop-up page, garden theme, jewelry centerpiece, multiple layers to create complexity, use metallic or iridescent paper.

“We have to make AI understandable and helpful for others in a very human-centered way.”

— **Amy Lokey**, Chief Experience Officer (CXO) at ServiceNow

SCAD Acts

Throughout AI's emergence, conversations, experiments, and implementation have flourished within the SCAD community. Students across the university employ AI within their design, classwork, and personal lives. Academic use of AI at SCAD spans from procedural methods (techniques and approaches used to generate content like terrain, cities, and characters algorithmically) and AI-empowered software (task-driven applications like chatbots, image and speech recognition, language translation, and much more) to generative AI programs like ChatGPT and Midjourney.

Under the direction of President Wallace, the SCAD AI task force organized the AI Summit to cement the technology's role in the continuous improvement of the university's design education. In preparation for the AI Summit, all academic departments at SCAD were asked to share how AI was being used in classrooms and degree programs. The responses and examples from student work across a range of disciplines were manifold.

“Whenever new technology comes out, it creates an expansion. Adaptability is key.”

— Fred Gilbert

Advertising

Animation

Architecture

Art History

Business of Beauty and Fragrance

Design Management

Digital Media

Fashion

Fashion Marketing and Management

Fibers

Fine Arts

Foundation Studies

Graphic Design

Illustration

Industrial Design

Interactive Design and Game Development

Interior Design

Jewelry

Luxury and Brand Management

Motion Media Design

Production Design

Service Design

Sneaker Design

Sound Design

User Experience (UX) Design

Visual Effects



Production design XR stage visualization for director Andrés Hermida (B.F.A. film and television).

Eliezer Garcia Gazai, B.F.A. visual effects.

Work created using Leonardo.Ai.

Prompt: An ethereal room illuminated by James Turrell.



81%

observe an opportunity to scale AI-related skill programs.



Moderator

Utkarsh Seth

Senior Staff UX Manager,
Android, Google

Internal Panelists

Dan Bartlett

Dean, School of Animation
and Motion, SCAD

Luis Cataldi

Associate dean, SCAD Atlanta

SuAnne Fu

Dean, School of Creative
Technology, SCAD

Munkhtsetseg (Muunuu) Nandigjav

Associate dean, School of
Animation and Motion, SCAD

Nye Warburton

Chair, interactive design and
game development, SCAD

External Panelists

Kate Aronowitz

B.F.A., graphic design, 1997
Portfolio Operations Lead,
GV (Google Ventures)

Fred Gilbert

VP, Head of User Experience,
Google Workspace, Google

George Joblove

VFX pioneer and motion
picture imaging consultant

Steve Johnson

VP, Design, Netflix

Amy Lokey

Chief Experience Officer (CXO),
ServiceNow

Seth Piezas

AI computing and ecosystems
leader

Bob Weis

Global Leader, Entertainment,
Gensler

SCAD Leaders

Jason Fox

M.F.A., graphic design, 2000;
B.F.A., graphic design, 1998
Chief academic officer, SCAD

Erin O'Leary

VP, institutional effectiveness,
SCAD

Alumni Mentor

Gregg Bernstein

M.F.A., graphic design, 2010
Director of User Research,
Hearst Magazines

A Gathering of Design Innovators

Held at SCAD's Deloitte Foundry, the two-day SCAD AI Summit explored the intricate relationship between artificial intelligence and design. Creative leaders, tech innovators, and academic visionaries facilitated meaningful discussions, shared insights, and explored AI's impact on the design world. A series of roundtable sessions, moderated by Utkarsh Seth, Senior Staff UX Manager for Android at Google, provided a platform for diverse perspectives to collaboratively steer SCAD through policies and procedures related to AI and its integration into university curriculum and offerings.

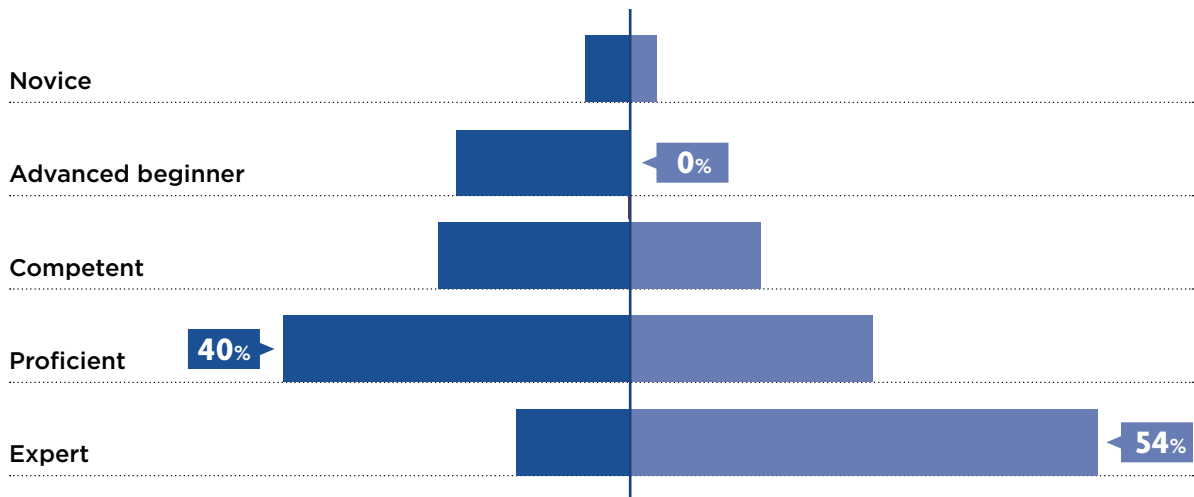
“How can we use AI to improve design?”

— **George Joblove**, digital visual effects pioneer and motion picture imaging consultant

The SCAD AI Summit establishes the university's future-forward position: AI awareness and proficiency level up design education and empower designers to become leaders.

Self-described experience with AI and design:

■ AI ■ Design





Collage of “AI vs. The Artist” senior collection with AI-enhanced illustrations, AI renderings, and a photograph of a sewn prototype.


Bailey Musnicki, B.F.A. fashion.

Work created using ChatGPT and NightCafe Creator.

Prompts:


ChatGPT — Questions about AI, female artists, and Artemisia Gentileschi.

NightCafe Creator — Key words like: neon, glitch, Renaissance painting, colorful tech, and Marie Antoinette.



“Good people can use the tools. Great people know why and how. It’s about arming them with the fundamentals, the underlying principles, the values involved: adaptability, curiosity, collaboration.”

— **Kate Aronowitz** (B.F.A., graphic design, 1997),
Portfolio Operations Lead at GV (Google Ventures)



AI in Action:

Wine Tourism Reimagined

**Iris Hanna, Elaina Lee,
Kristy Mallard, and Stephanie Rodríguez**

The challenge in LXMT 776 Travel and Hospitality: Global Management and Brand Building — become a disruptor in the travel and hospitality sectors. Students Iris Hanna (M.F.A. luxury and brand management), Elaina Lee (M.A. luxury and brand management), Kristy Mallard (M.A. luxury and brand management), and Stephanie Rodríguez (M.F.A. luxury and brand management) collectively demonstrated how the simple idea of camping in vineyards offers a “low-cost, low-risk business model” with the potential to evolve into luxury glamping.

To showcase their extensive research, concept, business model, and marketing strategy, the group employed Canva, which offers AI-powered options like Imagen to generate realistic depictions of their vision that populated their business proposal and accompanying presentation board. The renderings offered a high level of verisimilitude that enhanced the professional presentation of their ideas.

AI helped their concept, “Camp Vine,” become a memorable and visually striking experience of “relaxation and wine immersion surrounded by nature.”



Chair of luxury and brand management Alessandro Cannata says the course “prepares future marketing leaders,” part of which includes “a portfolio project focused on luxury leisure and business travelers.” AI-fueled programs like Canva, which created the images on this page, allow students like Hanna, Lee, Mallard, and Rodríguez to more fully focus on their research, insights, and business-driven concepts.

Be Strategic:

Learn Generative AI Basics

According to Bob Weis, Global Leader of Entertainment at Gensler, stadium designs tend to share a common “design geometry,” the result of seating expectations, accessibility considerations, amenities like restaurants, and more. When a client approached Gensler with a request for a stadium design that could transcend the standard form, the firm tried several ideas, including ideation through AI. In the past, Weis explains, they could have

asked sculptural architects, like Frank Gehry — talents who could achieve unique but unbuildable results due to restraining factors like scale and building codes. Generative AI, Weis says, is advanced enough to perform calculations that merge conceptual visions with buildable, more efficient designs. What is generative AI and how can it be used to achieve buildable architectural designs that would formerly be considered impossible?



Image for advertising campaign created to foster respect in the Valorant community.

Augustina Cha, B.F.A., advertising and branding, 2023;

Roxanne Chen, B.F.A., advertising and branding, 2023;

Patrick Eng, B.F.A., advertising and branding, 2023;

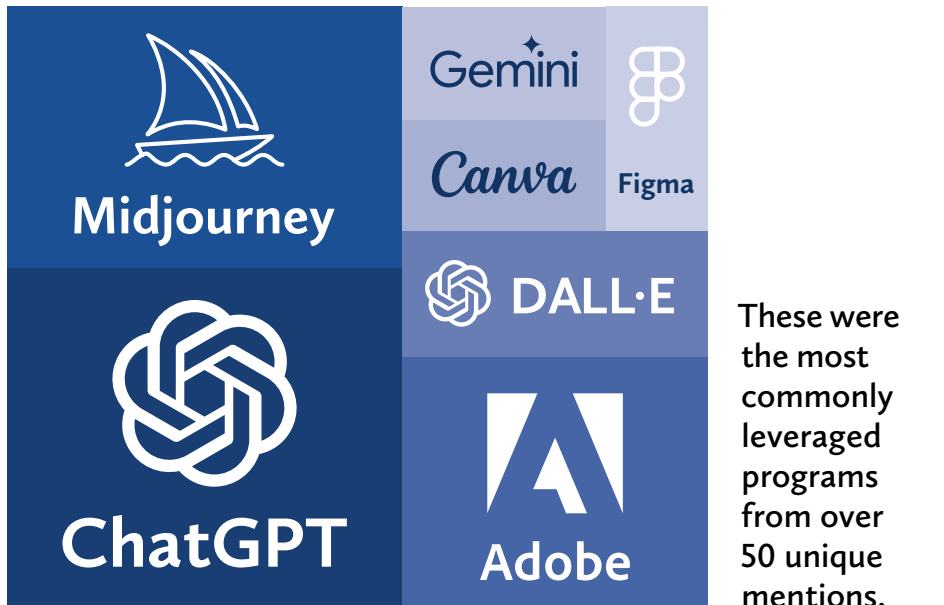
Markie Salter, B.F.A., advertising and branding, 2023.

Work created using Midjourney.

Prompt: Front view, mid-shot, hyper-realistic photo, a grandma sitting in a gamer chair playing intensely in front of her monitor from the front perspective with gaming lights as an accent color.

Defining Generative AI

AI itself is the broad concept of machine intelligence, or how computer systems or algorithms imitate intelligent human behavior. Examples of non-generative AI include facial and speech recognition, product recommendations, risk assessment models, autonomous vehicles, AI agents in video games, financial fraud monitoring, scheduling, and resource allocation — specific tasks that include data processing and analysis but don't create wholly new data from scratch.



Facets of AI include:

Machine Learning: AI that provides systems with the ability to learn and improve without being programmed. Apple's Siri is an example of AI that leverages machine learning but is not generative AI as its main functions include voice recognition, natural language understanding, task processing, and voice synthesis.

Deep Learning: A subfield of machine learning that trains artificial neural networks, increasing the complexity of patterns that can be learned.

Generative AI: A subset of deep learning that creates brand new content like text, images, audio, video, and code using existing content. It works by learning patterns and information given to the model as it's trained.

Key Principles and Concepts

Several types of machine learning models fuel generative AI. Key model types include:

Large Language Models (LLM): These neural networks are pretrained on vast amounts of text data. They are used for text generation, question answering, summarization, and more. Popular examples include ChatGPT 3.5 and 4 (OpenAI), PaLM 2 (Google), and Claude 3 (Anthropic).

Diffusion Models: Specialized for generating images, audio, and video from data, these work by gradually adding and removing noise from inputs. Popular examples include Stable Diffusion (Stability AI), DALL-E 3 (OpenAI), and Midjourney (Midjourney Inc.).

Multimodal Models: As generative AI has rapidly developed, multimodal models have emerged to advance toward AI that has the ability to connect and operate flexibly across different data domains. Incorporating elements of LLMs, diffusion models, and others, multimodal models handle multiple data modalities like text, images, video, audio, and more within a unified architecture. Examples include Gemini (Google), Constitutional AI (Anthropic), ImageBind (Meta), and Gen-2 (Runway Research).

Developer and user interactions with the models include:

Model Training: To train a generative AI model, developers require massive amounts of data — from billions of words to millions of images and videos. Although the models can “learn” in different ways, self-supervised learning is a common way to train, allowing the model to learn patterns and representations on its own over a period of weeks or months. Once trained, the generative models can provide sophisticated output after receiving a prompt. In the absence of human-made data, developers can also train models on synthetic data, which is created using algorithms.

“AI is a thought partner — someone who knows you, understands you, is able to work with you. It’s a new type of interface that lets you explore things faster. The gap between thought and creation is shrinking. Your limits are diminishing.”

— Fred Gilbert

Prompts and Prompt Tuning: In order to receive information from generative AI models, they must be prompted with text or instructions by the user. Prompt tuning optimizes and customizes prompts for more specific results. For LLMs, a prompt could be a sentence or a paragraph that sets the tone or context for the generated text. For diffusion models, the text prompt is designed and written to produce the desired image or video. Prompt tuning requires user experimentation and practice within each model in order to receive the desired results.

Generative AI in Design

Generative AI tools provide a wide range of services. These applications augment creativity and adapt to individual preferences or specific contexts in order to create designs that are more personalized or tailored to specific audiences. AI enhances the design process through:

Artistic Exploration: Artists use AI to explore new styles, techniques, or combinations of elements that they might not have considered, pushing the boundaries of their creativity.

Automated Design Iterations: In design processes, especially in fields like graphic design or industrial design, AI rapidly generates numerous design iterations, saving time and facilitating the exploration of diverse possibilities.

Communication: Depending on creatives' needs, AI accommodates a variety of writing styles and assists with visual presentations.

Creative Assistance: AI provides inspiration, suggests design variations, or autonomously generates elements of a creative project.

Interactive Art: When integrated into artwork, AI powers creations that respond dynamically to user input, creating immersive and ever-changing experiences.

Research: From preliminary research to contextual research and user journeys, AI facilitates and propels qualitative and quantitative results.

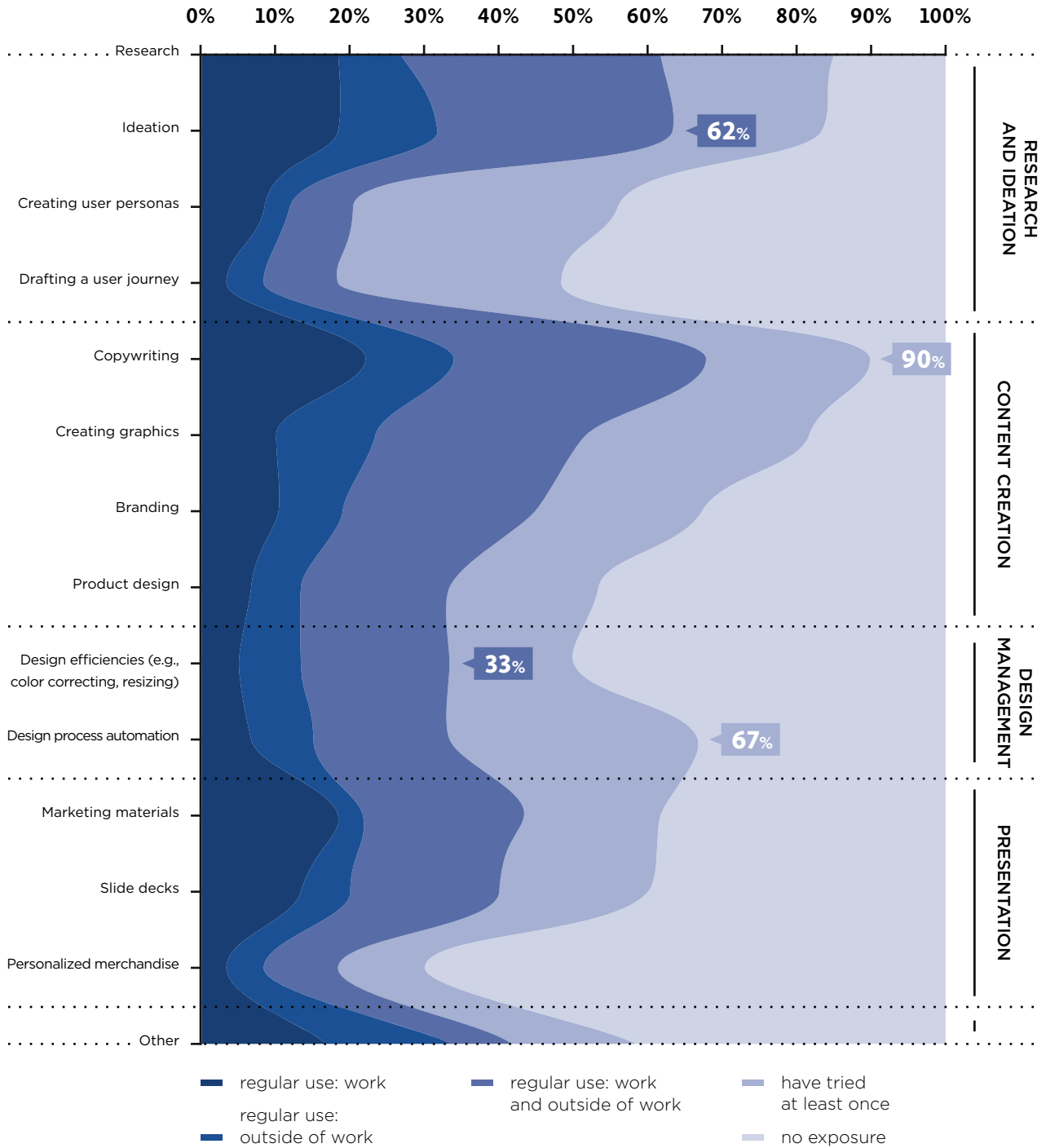
Style Transfer: Creatives who want to easily experiment with different visual aesthetics use AI to transfer artistic styles from one image to another.

The array of available tools transforms art and design by empowering creatives with a collaborator that accelerates design and amplifies creative output.

“Of course I should use these tools to express myself. What I’m bringing to the table is a voice and story that wasn’t there before.”

— **Dan Bartlett**, dean, School of Animation and Motion at SCAD

Frequency of AI use for design-related functions:



AI in Action:

Foundations of Art and AI

Jayda Collins

Foundation studies professor Cindy Crane asked students in DSGN 102 Design II: 3D Form in Space to use AI as a jumping-off point to create an “artistic time portal.” The goal: learn to apply their own creativity to generate a marketable product using AI in the design process. Jayda Collins (B.F.A. interactive design and game development) began with several design ideations in WOMBO Dream app, eventually landing on one she liked with the prompt “Golden snakes wrapped around a clock design.”

Crane’s assignment emphasized AI’s use as inspiration, rather than duplication, to employ the design principle “Economy,” which encourages designers to keep what they need and get rid of the rest. As a result, Collins turned to hand sketching to create a more simplified and buildable version of her AI-ideated choice.

After laser cutting, painting, wood staining, and assembly, Collins’ artistic time portal became reality.



Foundation studies courses like DSGN 102 provide students with studio experiences that build visual, conceptual, and creative abilities. Collins explains that AI, “was helpful in experimenting with different ideas to narrow down the look I wanted.” This unique, portfolio-worthy project showcases her mastery of the design process from ideation (as seen in the top two WOMBO Dream app images) to product.

Be Positive:

Embrace Design Possibilities

97%

are optimistic about the impact of AI on the design profession.

Though powerful, designers must learn generative AI's capabilities in order to properly deploy it. Steve Johnson, VP of Design at Netflix, recalls a test performed at the company to compare ideation results between the technology and his design team. AI, he says, took existing shows and recreated them "with a twist." However, the design team's unique answer to the challenge became the No. 1 Netflix hit,

Squid Game: The Challenge — a show that Newsweek called "one of the most compelling TV competitions of the decade." AI, Johnson explains, created "the same type of generic things" in repackaged forms. At Netflix, the power of AI helps populate personalized recommendations and visual interfaces for users. For new and unexpected shows like *Squid Game: The Challenge*, human insights and creativity triumph.

A New Frontier Awaits

In his noted essay, “The Work of Art in the Age of Mechanical Reproduction,” Walter Benjamin observed, “The history of every art form shows critical epochs in which a certain art form aspires to effects which could be fully obtained only with a changed technical standard, that is to say, in a new art form.” Humans have seen this happen with creative innovations like the printing press to make books, the camera to produce photographs and film, and now, generative AI to produce a wealth of content that expands humans’ range of expression. Although new technologies cause changes, an optimistic approach leads to more rapid design innovations, powered by AI and human ingenuity.



One of several Fall 2023 ARCH 727 Graduate Architecture Studio II: Comprehensive Design and Programming group-created images that introduced AI as a design companion.

Work created using Midjourney.

Prompt: Modern cabin on rocky island with pine trees.

Lead With Curiosity

Play and Discover

Generative AI tools are being created at an unprecedented pace. This point in the development timeline is an open space for invention, imagination, and exploration. Designers who approach AI with a sense of play form an open mindset and embrace possibilities.

Refine Taste

Tools like ChatGPT and Midjourney can generate thousands of iterations. Designers must study other art forms and work with these mediums to cultivate their inner understanding for ideas that transcend the ordinary.

Build Adaptability

Whether developing a generative AI tool or using one to achieve an intended effect, challenges are inevitable. The process of artmaking — in any form — teaches designers how to adapt to, and navigate, the unexpected to produce results.

Practice Self-discipline

Technology has created an age of abundance with choices too numerous for a human's lifespan. Designers require discipline to absorb meaningful content that helps them develop, grow, and reach their goals.

“It’s important to bring the same curiosity and playfulness you have in your analog process to AI to explore and discover.”

— **Muunuu Nandigjav**, associate dean,
School of Animation and Motion at SCAD

92%

believe AI has the potential to enhance creativity in the design process.

Build Confidence

Increase Time for Creativity

Generative AI tools remove the tedious and mundane from creation. Automating certain aspects of the design process gives designers more space to ideate and experiment.

“As workflow becomes more generative, you have more capacity to be creative.”

— **Nye Warburton**, chair, interactive design and game development at SCAD

Find Your People

Joining communities and building relationships contributes to professional literacy, allowing designers to learn about new methods to apply AI to their work. Cultivating social skills like networking and collaboration advances opportunities.

Define and Refine Vision

Generative AI allows designers to explore more options than ever. It takes multiple prompt iterations to achieve an ideal result from AI. This process allows young designers to refine their ideas and discern what defines quality.



Jewelry ideation for Van Cleef & Arpels.

Tanya Li, M.A., luxury and fashion management, 2024; M.F.A., fibers, 2022; B.F.A., fashion, 2020.

Work created using Midjourney.

Prompt: Set of knuckle rings worn above the middle joint of the finger, on the top knuckle of fingers, under the nail or on the nail. Made of gold using Van Cleef’s Perlée technique, single layer, elegant style.



Strengthen Foundations

Communicate

Communication is the conduit through which collaboration flows. Clearly expressing and exchanging ideas is crucial for teams to achieve understanding and keep projects moving forward to completion.

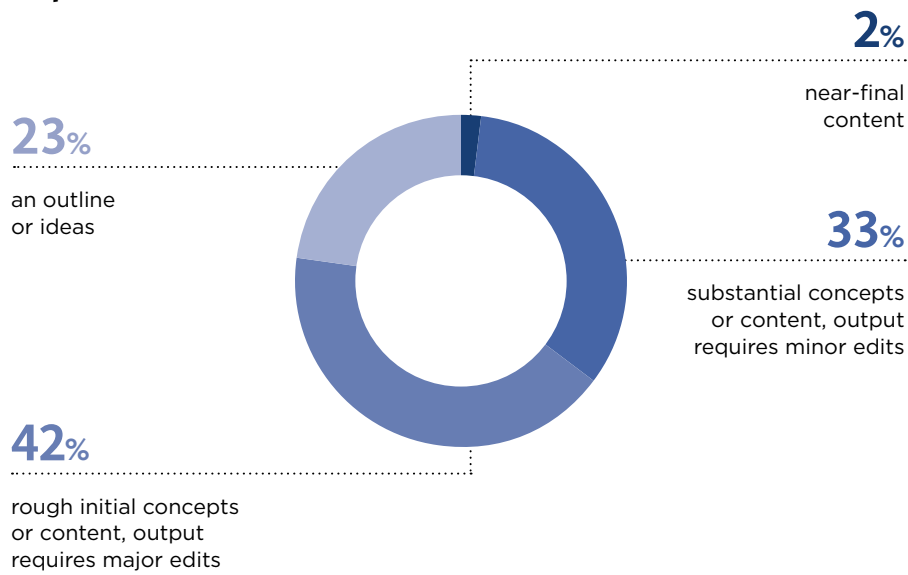
Think Critically

Critical thinking — analysis, synthesis, evaluation, observation, reflection, and reason — guides a designer’s actions and forms the bedrock beneath generative AI. Proper training helps designers:

- Make thoughtful selections,
- Discern design quality, and
- Pay attention to details.

For example, generative AI can produce hallucinations after receiving a prompt or a series of prompts. In the case of LLM-based tools, this can mean nonsensical language or fiction presented as fact; in diffusion-based tools, images can be uncanny, like producing strangely shaped hands or distorted faces. A designer must know how to recognize poor results and tune their prompts to produce results that work.

AI provides:



Research

Research informs all phases of process and development. Designers with business and technical acumen create the best results for all stakeholders. Without research on users, market, culture, history, and more, a product or service will be unable to meet user needs or will do so poorly.

Describe Process and Present

Designers must explain the role AI plays in their process and how it was intentionally employed. Clients and leaders expect transparency, which requires documentation and justification.

“If we can work faster and perform better, we can enable ourselves to have more time for conversations and storytelling.”

— **SuAnne Fu**, dean, School of Creative Technology at SCAD

“Effective collaboration is crucial in interdisciplinary projects involving AI. Designers should develop strong communication skills to convey design intent, understand technical constraints, and collaborate seamlessly with data scientists, engineers, and other stakeholders. Bridging the communication gap between design and AI teams ensures a cohesive and successful integration of AI into design processes.”

— SCADask AI survey respondent

AI in Action:

From Textiles to Typography

Paige Rydell

Professor Soohyen Park in GRDS 285 Production for Physical Environments asked students to design and produce a physical book with content created by generative AI. Paige Rydell (B.F.A. graphic design) began her AI ideation with texture. Firefly, she says, “was able to mimic pattern and consistency” in a very realistic way — an observation that led her ideation forward.

Rydell used Firefly to test three concepts. First, “emotions as textiles,” which gave her compelling results, but demonstrated that AI had difficulty with repeating patterns. Next, she employed a combination of the English alphabet with idioms, resulting in images and concepts AI could not grasp to properly visualize. Finally, Rydell experimented with “unrealistic delicacy,” an idea that she abandoned due to a lack of connection. Her final concept combined the English alphabet with textiles to create embroidered letters in a variety of bright colors, patterns, and styles: *The Threads of Typography: A book on modern embroidery*.

In addition to learning how to use AI, Rydell also utilized analog processes like stab binding, sewing with wax thread, using a book press, and wrapping a book cover.



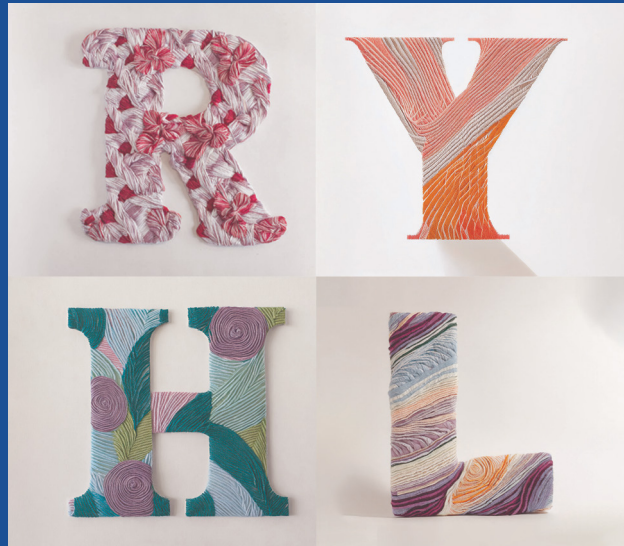
Prompt
embroidered flat letter K modern red partial pattern needle pattern overlapping within the letter white background

Clear styles

Photo x Surrealism x Minimalism x 3d x

Fabric x Yarn x Pastel color x

Suggestions Refresh



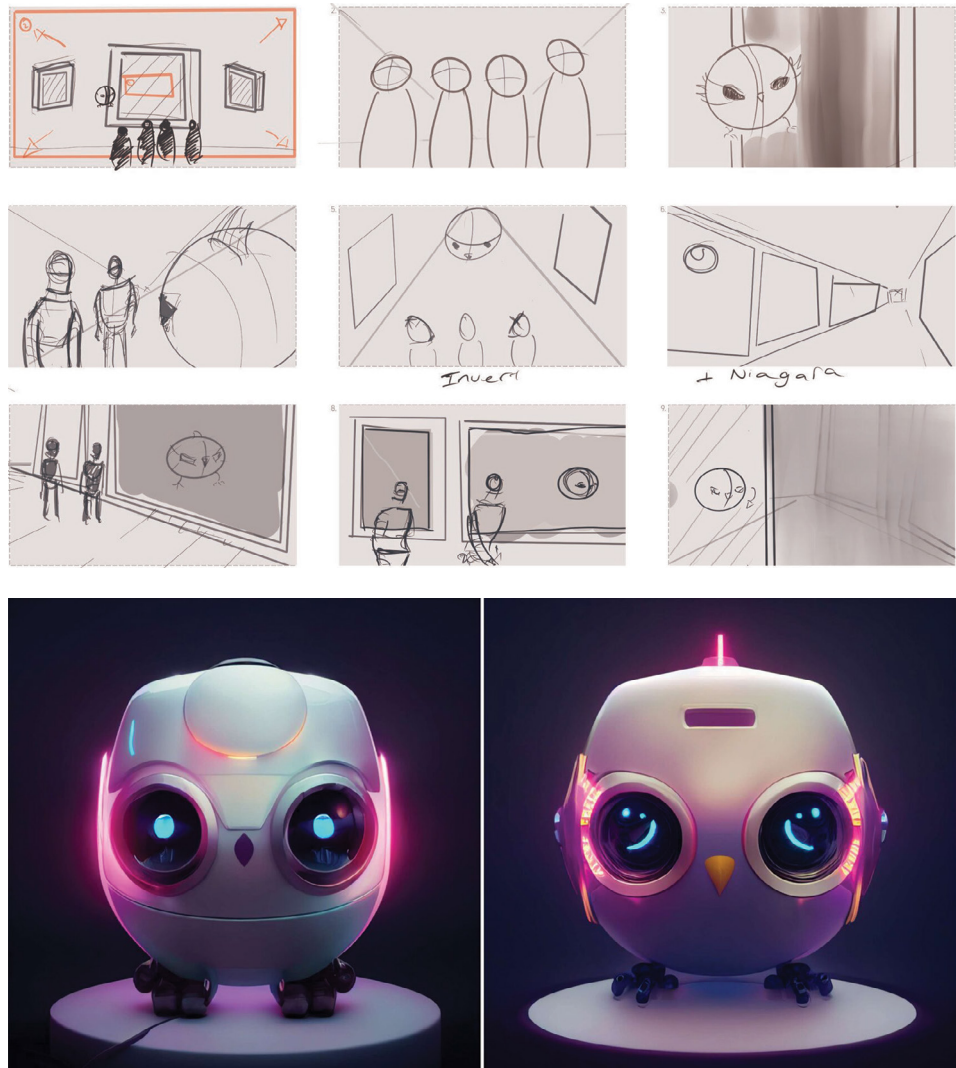
The book design project gave Rydell the opportunity to employ Adobe Firefly (top two images) for the first time. Although she experienced a learning curve and discovered limitations with fine details, she continued to ideate and discovered AI's visual strengths. She says, "If this is AI's starting point, I can't wait to have this tool in my arsenal when it gets even better."

Be Innovative:

Leverage AI for Creation

Fred Gilbert, Vice President and Head of User Experience for Google Workspace, began his role at the company on the art side. With a background in illustration, Gilbert found that getting in the door at Google was a challenge “because you had to pass a coding exam.” He talked his way into a “gigantic playground where you could do anything” — a workplace where people built “cool things from scratch.” The company, by providing its team with “fertilizer,

water, and sunshine,” cultivated innovative products and expansion. Because his art background was in demand, Gilbert worked in Google’s mobile group to build applications like Google Maps and contributed to “about 22 different products from scratch.” His “highlight reel” includes Google Photos, eight years of running YouTube, and overseeing all of Google’s productivity software. Today’s flourishing of generative AI, Gilbert says, “is the fun part of the journey.”



Creative treatment for a museum exhibition docent drone with storyboard (top) and AI drone iterations (bottom).

Desmond Du, M.F.A., motion media design, 2023; B.F.A., motion media design, 2019; Stephen Mok, M.F.A., visual effects, 2023; B.F.A., interactive design and game development, 2020.

Work created using Midjourney.

Prompt: Friendly and adorable flying drone named WH5H-U.

Find the Flow

100%

believe that AI can improve efficiency and productivity in workflows.

Work Efficiently

AI can now automate repetitive design tasks like resizing images, rapid prototyping, copywriting assistance, personalization, faster research synthesis, maintaining brand consistency, and more. The ability to work faster and more efficiently frees time for more meaningful phases of creation.

Ideate

AI's greatest potential lies in design's ideation phase. From solving the problem of the blank page to providing an endless canvas for play, generative AI expands ways that creatives can brainstorm and hone ideas until they're ready to move on to other phases of development.

Tell Stories

Regardless of generative AI's involvement, the human controls the narrative. It helps creators build room for design elements that require the human touch and time to weave meaningful stories.

“One of the best ways to utilize AI is in your ideation process where you can iterate quickly.”

— Muunuu Nandigjav

Collaborate to Innovate

Partner with AI

The symbiotic relationship that creators and generative AI share leads to inspired outcomes. Creators must frame AI as a collaborator or copilot in order to clearly define roles.

“Look at AI as a partner to you, where you actually have the chance to level up and become a more powerful, single creative.”

— Seth Piezas, AI computing and ecosystems leader



Image for Volvo: Emotionally Charged advertising campaign.

Augustina Cha, B.F.A., advertising and branding, 2023;
Xavier Crisp, B.F.A., advertising and branding, 2023;
Patrick Eng, B.F.A., advertising and branding, 2023;
Markie Salter, B.F.A., advertising and branding, 2023.

Work created using Midjourney.

Prompt: Crying Volvo car, photorealistic, 8k octane render.

100%

expect AI to become a valuable collaborator in the creative process.

Thoughtfully Apply

Choose the Right Application

From text generation to imagistic renderings, AI tools are relevant to nearly every aspect of design. They can be standalone products or embedded within familiar software like Adobe Firefly. Finding the right software, program, or application can be as easy as industry agreement or may require research and multiple testing to discover what works best.

Develop Prompts

Individual AI-powered programs or apps require specialized knowledge on prompting best practices. For example, prompting for text-based AI like ChatGPT differs from crafting prompts for visual AI like Midjourney. By learning the art of the prompt, creatives can take full advantage of AI's capabilities.


Employ Conversation Design

Conversation design is a multidisciplinary field that focuses on creation and optimizing natural language interactions between humans and machines. It ensures that interactions are user-friendly, effective, and align with the user's goals. Generative AI's role in conversation design includes natural language processing, contextual responses, user engagement, adaptability and learning, responding to ambiguity and variability, personalization, iterative design, and multimodal conversations. Everything adds up to creating an optimal user experience.




86%

think AI will significantly improve
user experiences in design projects.



“We have a lot of opportunities to grow and evolve alongside AI. Right now, we communicate with an interface that is limited and will change over time. That intelligence will become more reactive, more fluid, and more productive.”

— **Luis Cataldi**, associate dean
at SCAD Atlanta



AI in Action:

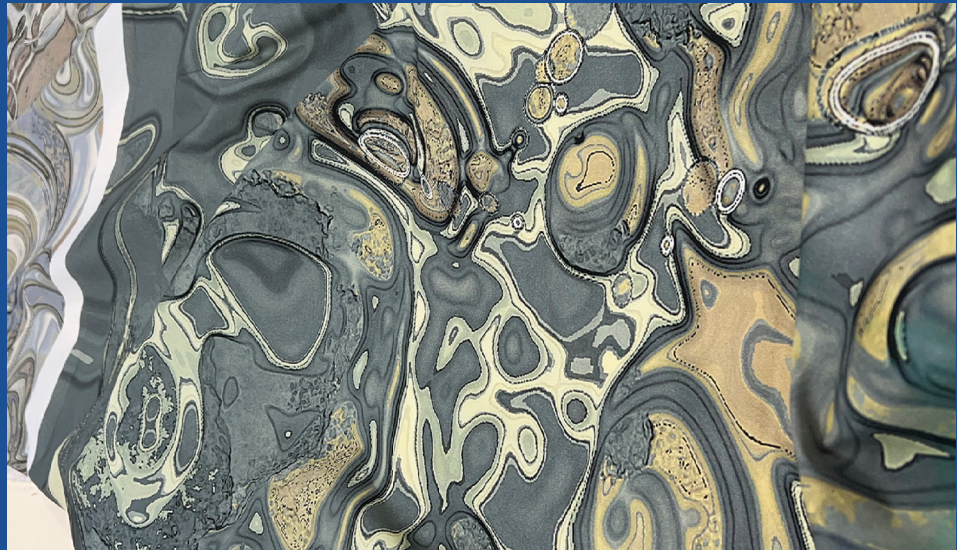
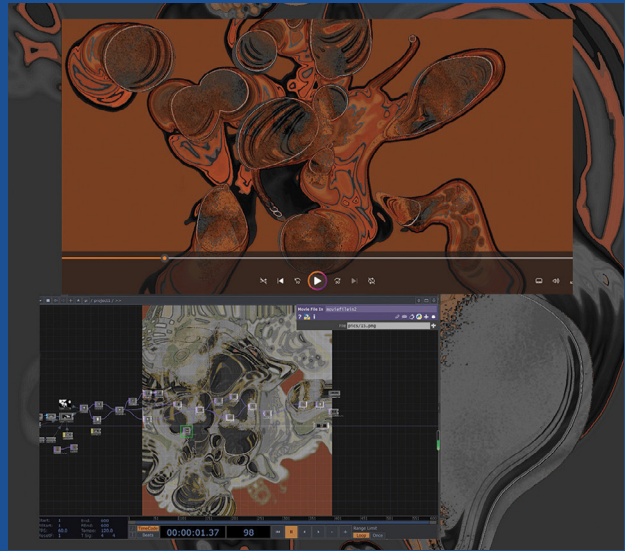
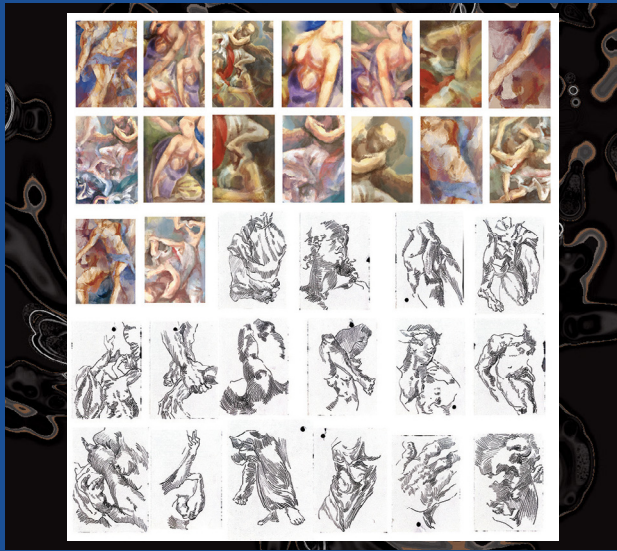
Past and Future Fashion Fusion

Rakee Chen

To create “The Era Collection,” Rakee Chen (M.F.A. fashion) explains, “I’ve embarked on a journey inspired by the innovative sounds of DJs Agents of Time and the profound imagery of Dante’s *Divine Comedy*.” To start, Chen gave Cybertron Furnace, a low-rank adaptation of LLMs (LoRA) training model, several of her drawings based on Renaissance artists like Michelangelo. She applied her LoRA to Stable Diffusion along with key words from Dante’s *Divine Comedy* to obtain AI-rendered “paintings.”

Next, Chen put the vocal composition “O bone Jesu” by Renaissance composer Giovanni Pierluigi da Palestrina and the song “Era” by Agents of Time through TouchDesigner, an interaction design software, along with the AI paintings. This resulted in colorful visualizations that moved in rhythm to the music.

Chen selected individual frames from the TouchDesigner video to create graphic prints on fabric for her collection designs.



Photographer: Xavier Thompson (B.F.A., photography, 2022)
Makeup artist: Blair Chang (M.A., fashion, 2023)
Model: Kamran McIntosh-Ross (B.F.A. user experience design)
Photography assistants: Ryan Liu (M.F.A. film and television),
Bixuan Zhang (M.F.A. film and television)

Chen built layers of influence into her collection's fabrics by using 32 of her works to train AI-powered Stable Diffusion (top left). She then merged the resulting imagery with music in TouchDesigner (top right). Prior to "The Era Collection," Chen earned accolades for other designs including: winner in Digital Fashion and finalist in Fashion Textiles for the 8th FIDA Awards, winner of the Rookie Excellence Award, and semi-finalist for the 2022 CFDA Geoffrey Beene Design Masters Scholar Award.

Be Compassionate:

Adopt Ethical Practices

100%

expressed some level of concern about the ethical implications of using AI in entertainment such as deepfakes and manipulation of content.

SCAD alumna Kate Aronowitz (B.F.A., graphic design, 1997) recalls working at Facebook in the early days when, “we were such optimists, we only thought of the great things — connecting with friends and expressing yourself.” By the time the company experienced fallout from the 2016 election, which prompted CEO Mark Zuckerberg to apologize in a testimony before Congress, Aronowitz

had transitioned to Wealthfront. Now Portfolio Operations Lead at Google Ventures, she leverages the lessons learned from earlier in her career to ask founders about the ethical implications of their ideas. “If all goes right,” she asks them, “how can it be used? If it goes south, what are those possibilities and how are you going to address it? How are you going to take responsibility?”

Shape a Confident Mindset

Establish Orientation

The increasing anthropomorphism of AI systems comes with psychological impacts. Designers and educators need to support users and students through this existential transition by setting proper expectations that help frame AI's evolution and rapid growth.

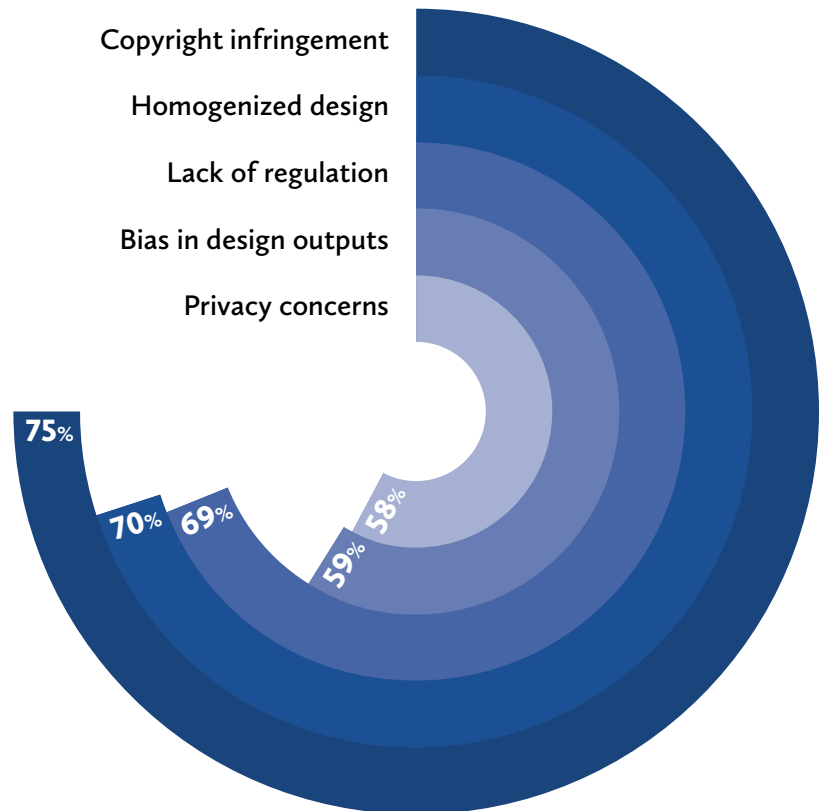
“We’re responsible for designing experiences in an ethical, responsible way. It’s our incumbent responsibility to use design for good.”

— Amy Lokey

Design for Good

Design educators must emphasize that designers have a responsibility to use AI ethically and for social good. This includes accounting for environmental impacts and bringing people together through thoughtful experience design. Values like empathy and equity must be prioritized.

Top concerns as they relate to AI and design: ("moderate" to "very")





Shoe reconstruction and deconstruction project with final edit (top left), Vizcom-generated iteration (top right), and AI refinement process (bottom).

Boipelo Lecha, B.F.A. fashion.

Work created using NewArc.ai and Vizcom.

Prompts:

NewArc.ai — Create a photorealistic high-def rendering of a performance sneaker with a rubber outsole, EVA midsole, a knit upper, and leather details. The shoe has two tongues.

Vizcom — Retain the curved lines of the image. Create it in a brighter color.



“As AI systems influence user behavior and decision-making, ethical considerations become paramount. Designers must navigate issues related to bias, transparency, accountability, and privacy to create responsible and inclusive AI-driven designs.”

— SCADask AI survey respondent

Consider Everyone

Design for Global, Diverse, and Equitable Use

When training generative AI systems and datasets, mitigating bias is crucial. Designers who cultivate relationships with engineers help develop products and services with an empathetic mindset. Designing for global diversity, equity, and accessibility requires that all team members in the design process, from stakeholders to creators, understand multiple conditions and perspectives.

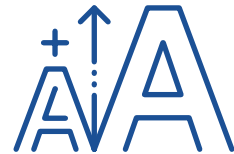
“When we say we’re training models, who created the model? In whose likeness? And where are they?”

— Steve Johnson

SCADask AI survey respondents note the following challenges with integrating AI and design:



Emphasizing ethical issues behind how AI models are trained



Making design more accessible to persons with disabilities



Prioritizing human-centered design



Embodying a different worldview or point of view

Demonstrate Transparency and Accountability

Document

When creators and developers provide transparency into data sources and documentation, they build credibility. This philosophy also applies to student work and documentation. Firmly established AI citation standards in an educational setting provide the foundation for ethical application in the professional realm.

Appropriately Apply

Clearly communicating generative AI decisions and results through explainable interfaces promotes trust and accountability. Measuring positive applications and setting boundaries protects against harmful misuse. Designers as well as engineers hold responsibility for understanding how their work might impact users.

“Understanding how AI systems arrive at specific outcomes is vital. Designing interfaces that communicate AI decisions in an understandable and transparent manner is a challenge that can enhance user trust in AI-powered applications.”

— SCADask AI survey respondent



Photograph (left) of a constructed garment that inspired experimental fashion ideations in Midjourney (right).

Shrutee Tokekar, M.A., fashion, 2024.

Work created using Midjourney.

Prompt: Skirts and blouses with voluminous silhouettes, fabrics like tulle and organza, and pastel colors.

Understand Privacy and Intellectual Property Protection

“I’m concerned about future copyright/content ownership implications for work heavily created and influenced by AI.”

— SCADask AI survey respondent

Cultivate Integrity

Because creatives have concerns over protecting their ideas, people across a number of industries are exploring technological and regulatory solutions like digital watermarking. Collaboration with engineers and computer scientists allows generative AI to move forward while protecting intellectual property.

Practice Stewardship

Keeping humans in the loop to curate, edit, and guide AI through the design process is imperative and prevents overreliance on technology. In all design phases, designers must anticipate and safeguard against potential harm.

“It’s important to protect the IP rights of artists and creators as we integrate AI tools into the creative process.”

— SCADask AI survey respondent

“We need to be responsible about making tools as efficient as possible and keeping that human in the loop to edit and curate.”

— Amy Lokey

AI in Action:

LAB 560 — AI Is an Ocean

In Fall 2023, SCADask and SCADpro partnered for a course about generative AI at SCAD. Students performed primary and secondary research that included student surveys, interviews, and hands-on work with generative AI programs to gain familiarity with the tools. Their deliverables included design assets like graphics and branding, a comprehensive website (lab560.com), and two developed and administered workshops for SCAD students interested in AI.

The popular LAB 560 co-creation workshops facilitated student education and engagement with tools like ChatGPT, Claude, Firefly, and Midjourney. Both workshops were conducted during the course in Fall 2023, with two more offered in Winter 2024.

Three of the students who formed the LAB 560 course attended the AI Summit on Day 2 to discuss the AI design experience with the panel: Lindsay Brine (M.F.A., service design, 2024), Mars Canada (B.F.A. illustration), and Seth Leister (B.F.A., user experience design, 2024).



The LAB 560 website and workshops included ethics discussions, demonstrations, and creative design challenges that allowed students to experiment with AI in a welcoming environment. One participant said that the event helped “in my career at SCAD and beyond!” An overwhelming success, the workshops demonstrated the positive effects of educated, hands-on engagement with AI.

Be Transformative:

Imagine the Future

Stories matter. Most designers employ visual and language-based forms, but there is enormous opportunity to communicate with data. Amy Lokey, Chief Experience Officer (CXO) at ServiceNow, says there was a time in her career where it hadn't occurred to her that math and data would improve her design. "I really hated math," she says, "I convinced myself I was terrible at it." Over time, she realized that she wasn't designing for herself, but for others and needed to expand her knowledge to improve. She studied

spreadsheets and asked questions in order to be able to explain what made particular designs successful or not — assertions that needed to be backed with data and research, and not rely on the subjective. "There's certainly qualitative feedback that we get through research," Lokey says, "but you balance the qualitative with the quantitative." Embracing new ways of design thinking contributes to the bottom line and demonstrates how learning new storytelling techniques leads to senior or leadership roles.

Trends and Innovations

Creative Direction

As AI shifts the focus from technical skills to ideation, the role of creative director will become elevated. Technical literacy will remain essential.

Storytelling

Ideas and stories remain crucial to design communication, regardless of form. AI's proliferation will further democratize storytelling and open doors for more creatives to share their vision.

Production

AI will continue to transform formerly established production pipelines, from expanded access to global talent and products to increased accessibility.

Massive Growth

Creative leaders like Fred Gilbert anticipate explosive growth that "should mature over the next five years."

"I see AI elevating the role of creative director as technical training becomes less important. Designers need to hone the skills of creative direction."

— Amy Lokey

93%

noticed slight to significant change in their industries and design practices in the last year.

AI in Future Design Practices

Business

Employers increasingly expect designers to be generalists capable of working across diverse projects. High-value skills include creative vision, adaptability, collaboration, communication, data and metric analytical ability, and business acumen. This alchemic combination helps graduates provide value for companies that seek unicorns.

Understanding metrics, data analysis, and return on investment separates leaders from contributors. In order to secure buy-in from executive stakeholders, designers require familiarity with the business drivers underlying their work.

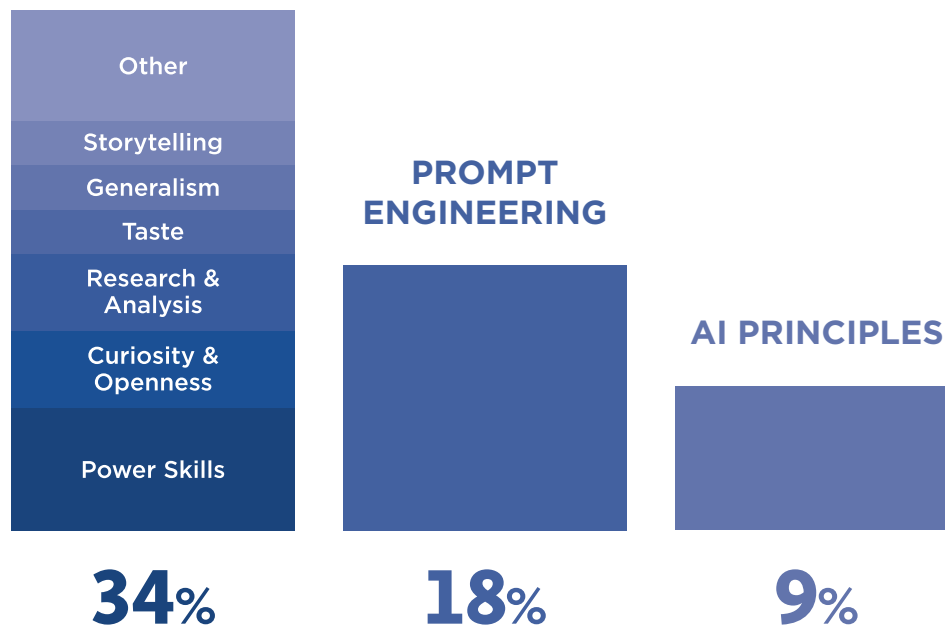
Designers must be able to compellingly justify their solutions' value to companies through strong written and oral communication. Such fundamental skillsets allow burgeoning designers to more quickly ascend to leadership roles.

“We talk about design and intentionality — anyone can produce something — but why do you think that your solution is the best solution for that problem?”

— Utkarsh Seth

The top three skills designers should acquire are:

FOUNDATIONAL



Nonlinear Careers

Business models and career trajectories in the design industry are rapidly changing. As a result, career paths have become dynamic journeys that often deviate from predetermined linear paths. Serendipity, new opportunities, and the ability to adapt to constantly evolving environments will define professional lives and reduce limitations.

“The more sophisticated AI becomes, the more important artistic vision and serendipitous creativity becomes.”

— Bob Weis

Opportunities abound to develop or adjust re-skilling programs and resources. As AI disrupts the design field, upskilling the existing workforce and providing professional development opportunities will close gaps.



A womenswear collection inspired by traditional Chinese medicine and acupuncture.

Simon Zhang, M.A., fashion, 2024; B.F.A., fashion, 2022.

Work created using Midjourney.

Prompt: Image of Zhang's original design sketch (left).



One of several Fall 2023 ARCH 727 Graduate Architecture Studio II: Comprehensive Design and Programming group-created images that introduced AI as a design companion.

Work created using Midjourney.

Prompt: Midcentury home on verdant grounds with science fictionalized night sky, watercolor styling.

91%

emphasize the importance of re-skilling current designers in AI for the future of the design industry.

Educational and Professional Development

Employer Expectations

Employers seek designers who can quickly execute elegant, high-caliber work, but can also clearly explain their process through an engaging story. The ability to weave a compelling narrative that communicates value proposition is a skillset often observed in effective leaders and innovators.

Great designers understand that they're creating for diverse users. Human-centered principles like empathy contribute to intentional and inclusive designs. Because the definition of entertainment can vary from culture to culture, designers who anticipate users' responses can help companies avoid challenges and allow creative ideas to flourish across locations.

“You can design for yourself all you want, but you won't get a job. You have to appeal to a mass audience. I want a designer who says, ‘I think that this is a fantastic design for this demographic in this region.’”

— Steve Johnson



From a Chinese clothing brand project.

Xinyi Luo, M.F.A. industrial design.

Work created using Midjourney.

Prompts: Woodblock print, Chinese landscape, simple abstract (left); A Chinese woman wearing a black short-sleeve shirt with embellished color and hoop earrings (right).

University Expectations

As technologies grow more sophisticated, cultivating creative thinking and artistic vision becomes paramount. Educators' evaluation of projects designed with and without AI provides insight into a designer's command of both AI integration and unaided ideation. Overall, an academic focus on holistic AI literacy over narrow mastery serves industry needs because creative leaders want designers who can lead, teach, and innovate. Students come to SCAD through their own unique journeys and worldviews. When they apply their perspectives to collaborative academic environments, they develop critical thinking and build on the power skills that employers seek. In order to explore and expand their skillsets, beginning designers require guidance within a creative, academic setting.

To move teaching and learning with AI forward, SCAD is:

- Embedding AI in pedagogy and curriculum;
- Creating workshops and resources for students and faculty, including the AI Advantage Portal, a strategic resource hub that helps designers integrate AI into their practice; and
- Continuing to connect with industry leaders.

AI adoption in the classroom requires a shared set of values infused with positivity and empathy. SCAD's AI Advantage Portal serves as the epicenter for community resources surrounding these technologies. It provides:

- An overview of AI;
- Key definitions;
- Examples of common design use;
- Information about ethics and academic integrity;
- Tips and tricks for individual applications;
- Student work examples; and
- University AI-related guidance and documents.

SCAD curates the AI Advantage Portal to serve the SCAD community and help designers meet their professional goals and employer expectations.

University-wide best practices as found in the AI Advantage Portal foster cohesion, respect, and awareness of the roles AI can play, or not play, in creative development. Just as it did in 1978, SCAD will continue to offer the next generation of dreamers and makers a future-proof learning environment where humans design for humans.

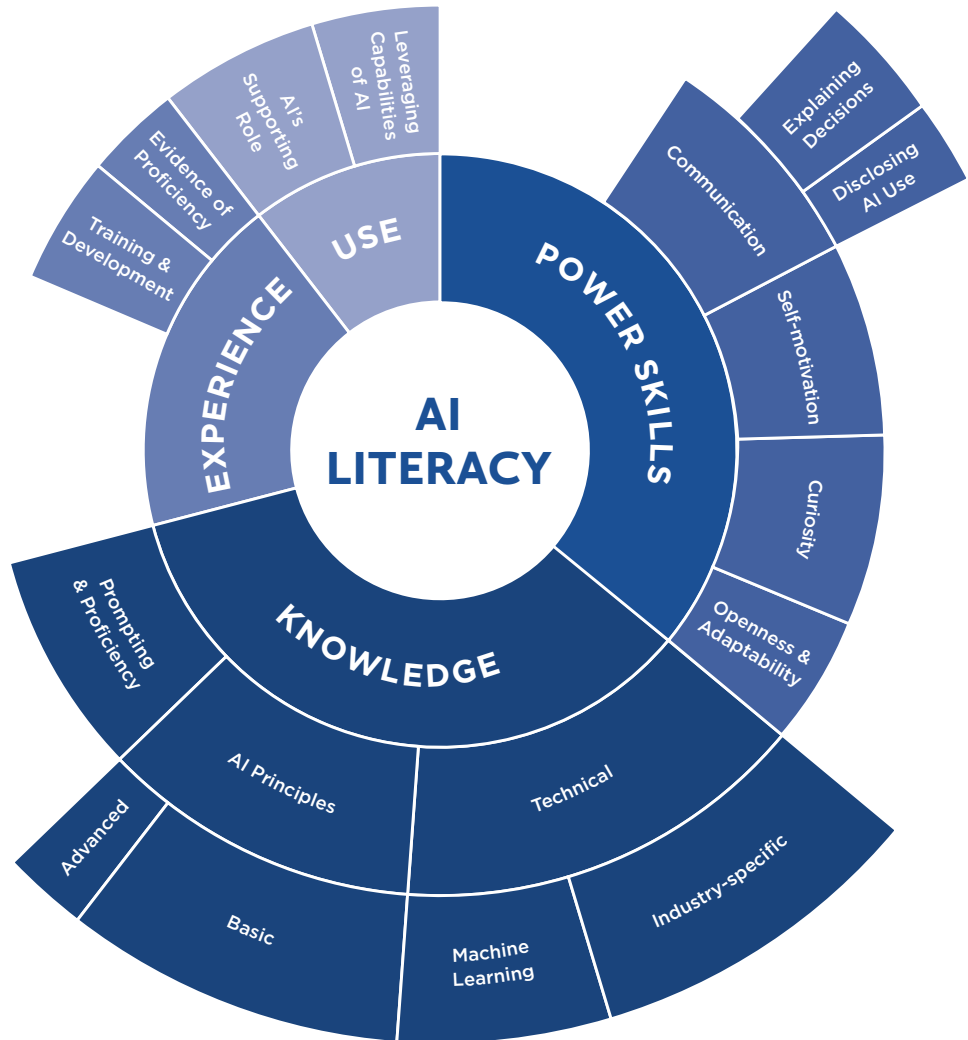
“The human part of AI is the most important.”

— Luis Cataldi

“When talking about any kind of technology, even more so with AI, it’s become important to start in a place of empathy.”

— Dan Bartlett

Exceptional job candidates demonstrate:



“Ask students: ‘Do you understand how to produce with AI and how to produce without it? Do you understand the implications of using AI?’”

— Seth Piezas

AI in Action:

Bridging Mediums and Cultures

Rashi Gupta

Rashi Gupta (B.F.A. graphic design) felt resistance when she learned she would have to use AI to create a book for Professor Soohyen Park's GRDS 285 Production for Physical Environments course. She says, "Initially, I was very unhappy and unwilling to be working with AI." As she employed Adobe Firefly to ideate book concepts, Gupta observed, "It was well out of my comfort zone and my initial concept ideas weren't working well with Firefly's image generation."

Through more ideations with the technology, Gupta discovered that an idea to bridge Chinese and Indian traditions would harness her culture and background, produce better AI-generated results, and offer increased flexibility as she progressed. Her finalized book images explore similarities between the two cultures featuring depictions of food, clothing, festivals, and more. "Once I started editing the images generated from AI and started the production process," Gupta says she had, "a lot more fun with the project."

Harmony in Diversity: Bridging Chinese and Indian Traditions demonstrates how the marriage of generative AI with analog design results in a portfolio-worthy work of art.



Professor Park's assignment challenged students with learning how to leverage AI technologies like Adobe Firefly to create a tangible product, pictured here. "My concept has a lot of richness, historical context, and intricacies," Gupta says, "I experienced a lot of challenges, however, my book turned out exactly how I envisioned it. I am now much more comfortable with working with AI!"

Act on Values

George Joblove, Academy Award-winning digital visual effects pioneer and motion picture imaging consultant, and Seth Piezas, AI computing and ecosystems leader, have both witnessed sea changes in technological advancements. When Joblove worked at Industrial Light and Magic (ILM) on films like *The Abyss*, *Terminator 2: Judgment Day*, and *Jurassic Park*, analog equipment was being replaced by computer graphics. He remembers, “there was a lot of nervousness.” As a result, ILM began a re-skilling program to transition their employees. When *Avatar* production began, Joblove recalls

how the new technologies highlighted the distinctions between craft and creativity. The transition, he says, taught his colleagues how to apply “their real talents in a different, expressive way.” Similarly, Piezas worked at Pixar during the development of *Toy Story* and advocated for applying new graphics processing technology to animation. That time, he says, “Was a particular inflection point where the industry was changing. A lot was unknown about the future.” Years later, he works for the very company responsible for the processors that helped revolutionize animated storytelling and now “train robots and simulation models.”

Like technologies that came before, AI supports creatives with infinite possibilities as designers across a range of professions incorporate it into business models, products and services, workflows, and more. To offer the best design education, SCAD embraces AI to fulfill its mission:

SCAD prepares talented students for creative professions through engaged teaching and learning in a positively oriented university environment.

And to enhance achievement of the university's vision:

SCAD will be globally recognized as the preeminent source of knowledge in the disciplines we teach.

Throughout the process, SCAD leads the way forward with its core values:

Be Strategic. Research and measure to guide work and document results.

Be Innovative. Generate new ideas and relevant solutions.

Be Positive. Approach all endeavors with enthusiasm.

Be Collaborative. Embrace and act upon our collective genius.

Be Transformative. Create life-changing experiences.

Be Compassionate. Treat everyone with kindness and care.

These principles have guided the university through decades of innovative design education and permeate this report. With its mission, vision, and values in mind, SCAD has crafted a set of human-centered values to further lead all stakeholders through this monumental technological transition.

SCAD AI VALUES

Be Human-Centered

Prioritize AI design that enhances human experience, addresses real-world needs, and promotes sustainability.

Be Inclusive and Equitable

Design initiatives and solutions for all while empowering the SCAD community to develop and affirm AI advancements.

Be Involved

Foster positive collaboration and shared knowledge among faculty, staff, and students to explore AI's creative potential.

Be Curious and Adaptable

Embrace professional development opportunities surrounding AI to continually build literacy in trends, practices, and ethics.

Be Empowered

Encourage the entire SCAD community to participate in AI-related initiatives, research, and decision-making.

Be Transparent and Accountable

Provide clear road maps on AI development and implementation while communicating AI-related impacts, capabilities, and challenges.

Be Ethical

Uphold ethical standards and principles in AI design, development, and deployment, prioritizing fairness, privacy, security, and respect.

Reflections on the Future

The creative leaders at the AI Summit offered several insights about what the future could bring:

- Further maturation and refinement of AI technologies;
- Firmly established best practices and implementations;
- Redefined career roles;
- Increased time for creativity and ideation;
- More efficient workflows and production pipelines; and
- New forms of creative expression.

With an infinite array of possibilities ahead, SCAD continues to seek insights through conversations and research that evolves AI education and encourages lifelong learning.

Call to Action

SCAD's call to action is clear — proactively infuse ethical AI principles into all facets of the university and beyond by living its values, encouraging continual growth, and taking decisive action. By anchoring AI's creative development in an inclusive, community-driven ethos, SCAD unleashes its transformative power for the enrichment of all. The university calls on the creative community to unite in shaping an AI-empowered future and elevate human potential.

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AI assisted with survey insights and analysis, and with editorial support.

SCADask generates timely research at the intersection of commerce, creativity, and culture. With a purpose of educating the public with new insights on trending topics as well as elevating SCAD as the preeminent source of knowledge in the disciplines we teach, SCADask equips external partners to address a wide range of emergent business opportunities. Under the supervision of qualified university leaders, SCADask identifies, formulates, and tackles research questions that are relevant to SCAD disciplines and appealing to a general interest audience. The qualitative and quantitative results and strategic insights produced from SCADask research synthesize existing knowledge from SCAD programs and new research assignments with external partners.

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