



Tina Miller

Executive Director, Creative x Communications Enterprise Technology February 13, 2025

ASU Charter

ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.

ASU at a glance

181,000

Unique students enrolled at ASU across all sessions of fall 2023, spring 2024 and summer 2024

41,000

New students - for fall 2024 - first-year, transfer and graduate 1 in 4

New students in fall 2024

17,000

Incoming, first-year students

9,000

New first-year students from Arizona; a new university record

Innovation is in our DNA

For the **tenth** year in a row, ASU is No. 1 in innovation among American universities, ahead of Stanford, MIT and Caltech, in the annual "Best Colleges" 2024 rankings by U.S. News & World Report.

1 in 3 enrolled at ASU are first-gen college students.

Top majors for incoming first-year students

- Business
- Computer science
- Mechanical engineering
- Applied biological sciences
- Forensic science
- Aerospace engineering
- Community health

More than 16,000 veteran and military-affiliated students enrolled for fall 2023, a university record.

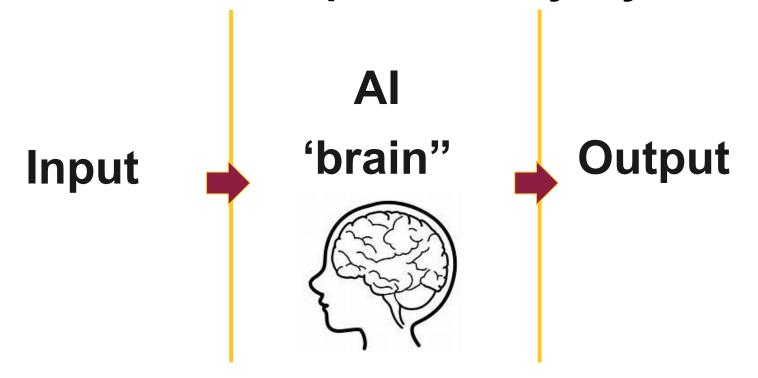


What is generative artificial intelligence (AI)?

Artificial Intelligence (AI) refers to machines designed to perform specific tasks that typically require human intelligence, such as recognizing speech, solving problems, or playing chess.

We've been using AI for more than a decade: Siri/Alexa, autocomplete, spell check, Google translate, Netflix and Amazon recommendations.

Al is like teaching a computer to think and learn so it can help with everyday tasks.



ASU AI guiding tenets



Principled Innovation®



Shaping tomorrow's innovations



Empowering creativity



Helping our community keep pace responsibly



Accessible tech for all

Adopting AI - a "calculated" risk



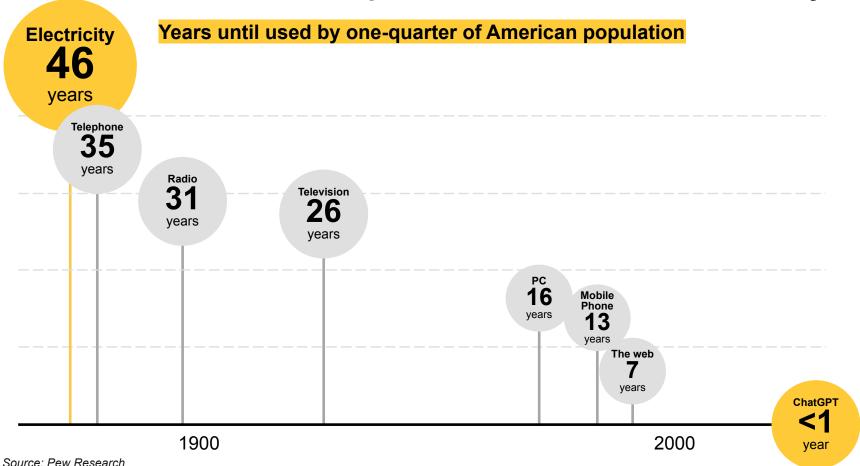




"I have yet to be convinced that handing them a machine and teaching them how to push the button is the right approach. What do they do when the battery runs out?"

-Math Teacher in 1975

The rate of innovation adoption has accelerated dramatically



"Al is poised to transform every aspect of our lives, from healthcare to education, and it's crucial we guide its development with a focus on ethical considerations and societal benefit."

President Michael Crow

Al in our everyday lives















Al and healthcare

How Al is transforming healthcare for a healthier, longer life

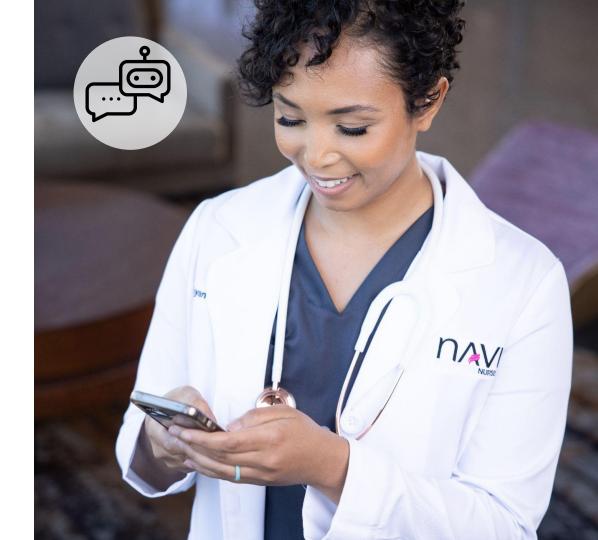
- Personalized medicine
- Remote monitoring
- Virtual health assistants
- Chronic condition prevention



Meet Sam, an Al-powered bot for health sciences

Arizona State University introduced "Sam," an Al-powered chatbot, to help health sciences students practice motivational interviewing, simulating patient interactions for behavior change scenarios like quitting smoking. The AI provided students with varied and realistic conversational pathways, as well as immediate feedback, which enhanced their learning experience and offered new possibilities for AI integration in education.

Read more at **tech.asu.edu/stories**.



Al and financial security

How Al improves financial management

- Al-powered financial tools
- Fraud detection systems
- Personalized financial planning



Al and social connections

How Al strengthens social connections

- Enhanced social platforms
- Discovering local and online events and groups
- Immersive social experiences with AI and virtual reality (VR) for social engagement



Al and bridging the digital divide

How AI makes technology easier and accessible

- User-friendly Al tools
- Voice-activated assistance
- Devices tailored for older adults



Students practice language skills with Al-powered Language Buddy

German 101 students at Arizona State University used a custom Al tool called "Language Buddy" to practice speaking skills asynchronously, which provided immediate feedback and flexible learning opportunities. Despite initial reservations, the tool received positive feedback from students, with plans to expand its capabilities for more personalized language learning.

Read more at tech.asu.edu/stories.

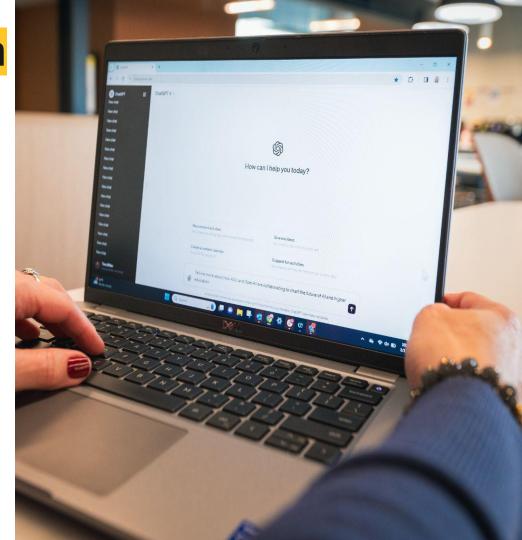


Navigating the digital revolution in higher education: ASU<>OpenAl case study

ASU's collaboration with OpenAl charts the future of Al

In January 2024, ASU made global headlines as the **first university to collaborate with OpenAl.**

The collaboration brings the advanced capabilities of ChatGPT Edu into higher education, setting a new precedent for how universities enhance academic, research and work environments.







https://www.youtube.com/watch?v=ZL9C1B46nIY





Al Innovation Challenge areas of impact

- Support teaching and learning
- Advance research with societal impact
- Enhance the future of work

ai.asu.edu/Al-Innovation-Challenge

Al Innovation Challenge overview

550+

proposals submitted

3

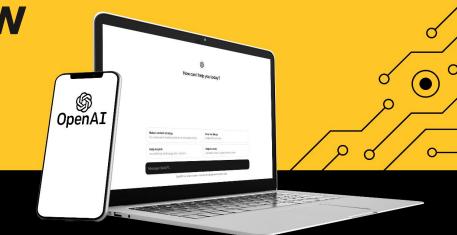
semesters and counting

220

projects activated

A focus on impact

Support teaching and learning Advance research Enhance the future of work



By the numbers

Launched on February 1, 2024, the Al Innovation Challenge has been offered across three semesters — with projects currently underway for fall 2024.

Spring 2024

105 projects activated

175+

proposals submitted

Summer 2024

114 projects activated

200

proposals submitted

Fall 2024

120 projects activated

155+

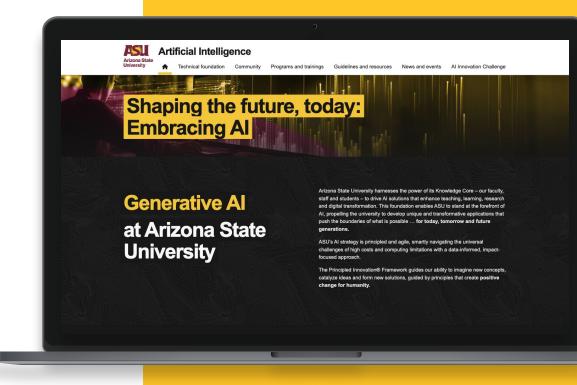
proposals submitted





AI at ASU

- Average 1000 new and unique visitors/week
- 75,000+ new and unique visitors since launch in late 2023
- https://ai.asu.edu



Let's try genAl!

Generative AI is a type of artificial intelligence that can create new content, such as text, images, audio, video, code, or ideas, based on patterns in the data it's trained on.

Humans interact with GenAl using prompts.

ChatGPT (chat-based generative pre-trained transformer) is a chatbot example of a GenAl tool.

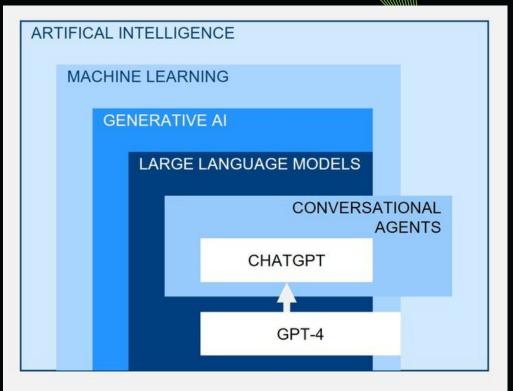
What ChatGPT can do for you

Book and movie reviews	Creative writing	Current events	Entertainment
Event planning	Exercise ideas	Financial literacy	Gardening tips
Genealogy and family history	Health information	Home improvement	Language learning
Learning new skills and/or hobbies	Personal development	Recipe suggestions	Recommendations and reviews
Social media help	Time management	Travel planning	Writing assistance

What is a Large Language Model (LLM)?

Google Blog definition:

"Large language models (LLMs) are one type of generative AI since they generate novel combinations of text in the form of natural-sounding language."





How to download ChatGPT

- 1. Open the App Store (iPhone) or Google Play Store (Android).
- 2. Tap the search bar and type "ChatGPT" or "OpenAl ChatGPT."
- 3. Look for the official ChatGPT app by OpenAl.
- 4. Tap "download" or "install" and wait for it to load.
- 5. Open the app and sign in or create an account.
- Start "chatting" with ChatGPT by asking questions, also known as "prompting."
- Congratulations! Now you know how to use genAl!

Download ChatGPT with QR code



How to get the best answers from Al

Tips for prompting

- **☑ Be specific** Instead of "Tell me about history," try "Tell me about the causes of the American Revolution in simple terms."
- **✓ Give context** Instead of "Help me with my phone," try "How do I set up voicemail on my iPhone?"
- Ask for step-by-step instructions Try "Explain how to make a Facebook post, step by step."
- Refine your prompt If the answer isn't quite right, ask "Can you simplify that?" or "Give me a shorter response."
- ✓ Use Al for fun and learning Ask "Tell me a joke," "Recommend a book," or "Teach me an easy yoga stretch."

Think of AI as a conversation with a friend.

The clearer and more thoughtful your question, the better the response!

An exercise in prompting - #1

Healthcare Use Case: Managing medications and understanding a health condition

1. Start with a Basic Prompt:

"Explain hypertension in simple terms."

2. Refine the Prompt:

"Explain hypertension in simple terms for a senior citizen and include lifestyle changes that can help manage it."

3. Make it Personal:

"Can you provide a weekly meal plan for someone with hypertension, focusing on low-sodium and heart-healthy foods?"

4. Add More Specificity:

"Can you create a shopping list based on the weekly meal plan suggestions?"

An exercise in prompting - #2

Travel Use Case: Planning a family trip to Hawaii

1. Start with a Basic Prompt:

"Plan a trip to Hawaii."

2. Refine the Prompt:

"Plan a 5-day trip to Oahu, Hawaii, for a senior couple, focusing on relaxation and cultural activities."

Make it Detailed:

"Include daily activities, travel times between destinations, and recommendations for senior-friendly restaurants."

4. Add Personal Preferences:

"Add a list of accessible attractions and local markets to visit, as well as one day dedicated to a guided tour."

True or false: The AI reality check

Common signs of Al-generated images

- Hands and fingers: Al struggles with correct finger placement (extra or missing fingers).
- Eyes and facial symmetry: Often too perfect or asymmetrically distorted.
- Background artifacts: Al can create strange distortions in background details.
- Texture and lighting issues: Artificial-looking skin, overly smooth or inconsistent lighting.
- Inconsistent text and logos: Al cannot generate readable text well in images.

Real-world implications – why this matters

- Scams and financial fraud
- Political and social manipulation
- Fake health and medical information
- Emotional exploitation and predatory advertising
- Deception in personal relationships
- Privacy and data security risks





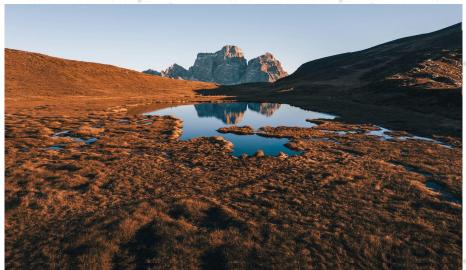




















Safety and ethical use

Safety and responsible use of genAl

- 1. Never input personal or sensitive data or intellectual property.
- 2. Always fact check. Even Chat GPT has its off days.
- 3. Most free versions of public GenAl tools offer no data privacy protection.
- 4. Activate multi-factor authentication to enhance security. (See your system setting to enable, then link your phone number or email. Next, follow the directions to complete set up.)
- 5. Ask a trusted friend or family member to verify questionable images before acting on them.



Al resources



"Co-intelligence: Living and Working with Al" by Ethan Mollick

"The Age of Al: And Our Human Future" by Henry A Kissinger, et. al.

"Generative AI for Beginners
Made Easy: Master Artificial
Intelligence and Machine
Learning Fundamentals, Learn
Creative AI, and Enhance Your
Skills" by Modernmind
Publications



"The Future of Being Human" by ASU professor Andrew Maynard

"One useful Thing" by Ethan Mollick

"The rundown AI" by Hubspot



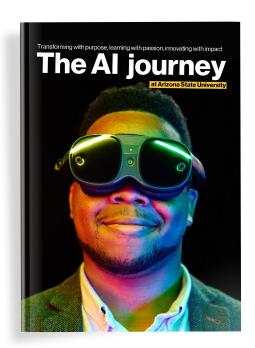
"Hard Fork" - Hosted by New York Times with Kevin Roose and Casey Newton

"The Artificial Intelligence Show" - Hosted by Paul Roetzer and Mike Kaput

"The Al Breakdown" - Hosted by Nathaniel Whittemore

"TED Tech" by TED Audio Collective

ASU Al leadership



Transforming with purpose, learning with passion and innovating with impact

Avaliable online



Shaping the future, today: Embracing Al

ai.asu.edu



Arizona State University Artificial Intelligence Shaping the future, today: **Embracing Al** Generative AI at **Arizona State** University At Arizona State University, we embrace generative AI not as a replacement for human intelligence but as a tool to enhance our collective creativity and problem-solving. ASU's knowledge core enables us to stand at the forefront of innovation. propelling the university to develop unique and transformative applications that push

Visit the AI website

<u>View our</u> <u>Al Journey</u>

Thank you!



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