

ASU provides access to AI-supercomputing for all

Students, faculty exploring ways the AI Research Acceleration Platform can revolutionize their research

By Stephanie King, ASU News
October 13, 2026

Until recently, advanced computing power has been associated with researchers and industry giants; now, Arizona State University is bringing unprecedented access to its entire community through the ASU AI Research Acceleration Platform, or AIR Platform.

Supported by a donation from Intel, [ASU's AIR Platform supercharges](#) the university's advanced computing capacity to enable quicker response times — even when supporting high volumes of prompts. Housed within the university's governed digital environment, AIR also helps address growing privacy concerns by ensuring information doesn't leave the campus ecosystem.

And in less than six months, breakthroughs for research, education and institutional innovation are already underway.

"The power of the AIR Platform goes well beyond computing capacity. We are already seeing what becomes possible when we put advanced AI capabilities into the hands of more researchers and students across disciplines," said Sally C. Morton, executive vice president of ASU [Knowledge Enterprise](#) and ASU's chief research and innovation officer. "By lowering barriers to advanced AI, we are creating opportunities to ask bigger questions, explore new ideas and accelerate discoveries that can make a meaningful difference in people's lives."

As the university looks at expanding AI access and broadening research efforts, students are leading the way.

Today all ASU students can access AIR

The newest and most accessible pathway to AIR Platform is through [CreateAI](#), the university's flagship AI tool kit. Used by more than 55,000 members of the ASU community, CreateAI Builder offers a range of AI models to choose from when building a customized AI experience. Select models, including Google's Gemma 4, are powered by the university's AIR Platform.

Early explorations of AIR-powered AI experiences by students took place in August 2026 during a hackathon-style Spark Challenge. Groups of students, faculty and staff teamed up to build an app inside CreateAI Builder that is powered by the AIR Platform.

Two ASU students earning master's degrees in computer science, Saisrivathsan Manikandan and Shrey Bishnoi, took the top prize for their accessibility tool to support those with visual impairments.

"The tool ensures genuine, verifiable educational equity where no student is left uninformed," Manikandan said.

Their project automatically writes alt-text descriptions for every image in a PowerPoint file and saves them directly into the document once the system is confident the description is accurate. Anything uncertain is flagged for a human to review or rewrite. The team built the entire tool on AIR's secure, on-campus gateway, so no student or faculty material ever reached an outside model.

To date, CreateAI has supported over 300,000 queries from the ASU community through the AIR Platform.

Building emotional intelligence with synthetic data

Professor Chitta Baral, Rishitosh Kumar Singh, Amir Saeidi, Shamanthak Hegde and Shrinidhi Kumbhar from the [School of Computing and Augmented Intelligence](#) are using AIR to develop an emotionally intelligent customer service agent.

In order to train the AI agent, the team needed to develop a collection of emotionally based responses: confusion, frustration, anger, etc.

Training the agent to recognize a range of emotions requires a high volume of responses that demonstrate each emotion. Using AIR's capacity to generate quick responses, the team simulated approximately 3,000 task scenarios using over 8 billion tokens, which is a massive amount of AI data processing (tokens are measurements of the amount of text that an AI reads and generates).

This ultimately developed an emotional benchmark the team calls the Tau-Emotion-Bench that can be used to train other agents; the team has been accepted to the UserSim workshop at NeurIPS 2026.

While this example showcases AIR's ability to produce an immense amount of synthetic data, the next example shows its ability to support predictive modeling.

Accelerating protein research with predictive modeling

Led by L. Felipe Benites, Louie Slocombe and Sara I. Walker of the [ASU Beyond Center](#), a team is using AIR to run predictive modeling to better understand large-scale protein folding and its interplay with protein atomic composition.

All living organisms on Earth use 20 amino acids to build proteins. The team used predictive modeling across more than 20,000 protein sequences to investigate the consequences of removing amino acids. Their paper is [available as a preprint](#) and is currently under peer review in a high-profile journal.

To date, there are over 500 ASU researchers leveraging AIR. All these projects require high levels of advanced computing that were not readily available prior.

Powering advanced AI in the classroom

Students at ASU will also engage with AIR through classroom tools this semester.

For example, two courses will use Jupyter Notebook, an interactive tool for writing and running code, which will connect to AIR to power the experience. The courses are taught in [The College of Liberal Arts and Sciences](#) and [The GAME School](#), part of the [Herberger Institute for Design and the Arts](#).

Associate Professor Alex Lee of the Herberger Institute's School of Art is also leveraging AIR to run image and video generation models for his new AI Tools for Animation course. Assistant Teaching Professor Ahmed Barakat's role in the course is to help faculty and students find better workflows and production pipelines.

"My goal was to leverage the growing ecosystem of open-source image and video generation models that can run locally," Barakat said.

Working with the ASU [Research Technology Office](#) team, part of ASU Knowledge Enterprise, Barakat realized AIR would be a good fit for the students' needs because it "provides a more accessible and scalable way for students to use these models without installing and maintaining their own instances or duplicating computational resources."

Barakat continues to work with RTO to expand the available models and capabilities, both for the students in the School of Art and for HIDA more broadly.

The introduction of AIR has significantly increased access to a broad range of labs, researchers, graduates and now even undergraduate students conducting science in exciting new ways without the steep learning curve of computer science.

For ASU faculty, students, staff and researchers interested in building custom AI experiences with CreateAI Builder, visit ai.asu.edu/ai-tools/createai-builder.

For more information on the Research Technology Office AI services, visit rto.asu.edu/ai-research-support/.

This story originally appeared on [ASU News](#).

Main image



As the university looks at expanding AI access and broadening research efforts, students are leading the way. ASU image