BREAK THROUGH TECH
Fall AI Studio

FREQUENTLY ASKED QUESTIONS FOR
PROSPECTIVE INDUSTRY PARTNERS

What is involved in hosting a Fall AI Studio Project Challenge?

1. Your company identifies an employee volunteer with AI/ML expertise to submit a challenge(s) for our New York City, Los Angeles, Boston, or Virtual program (based on their location / your company's location preference)
2. If their challenge is accepted, the employee is onboarded as an AI Studio Challenge Advisor and matched with a team of 4-5 student participants. (In New York, each accepted project will be assigned to two teams, and companies will be asked to provide a Challenge Advisor for each team.)
3. The Challenge Advisor provides guidance to their team throughout the fall - meeting virtually every 2 weeks to answer questions and share feedback - and convenes an audience for the students' final presentation in December (e.g., leaders in the host company's Data/AI org, recruiting teams, etc.).
4. Your company may decide to invite the students to apply for a Summer 2024 internship or full-time role. All student participants end the program with an industry project "credential" that they can add to their portfolio.

Is there any cost involved for participating AI Sudio Industry Partners?

No, there is no cost involved!

Can prospective AI Studio host companies meet with Break Through Tech AI before submitting a Project Challenge, to learn more and ask questions?

Yes, and it's a required step in the process! Please fill out this short Interest Form, and a member of our team will get in touch to schedule a call so that you can learn more about the AI Studio submission process and timeline, ask questions, and get a link to the AI Studio Project Challenge submission form.

What types of organizations can submit an AI Studio Project Challenge?

Any interested company, public sector organization, or nonprofit is invited to submit a challenge. The main criteria is that your organization can offer up a "real-world" challenge that can be addressed with machine learning; and that a technical expert from your organization will be available to support the student team assigned to each accepted challenge, as their designated "Challenge Advisor". (Also see below, "What makes for a good AI Studio Project Challenge?")

How many AI Studio Project Challenges can each organization submit?

Interested organizations are welcome to submit as many challenges as they would like, either for one Break Through Tech AI program site or across multiple program sites (e.g., 3 challenges for New York City; 1 challenge for New York City and 1 challenge for Los Angeles). Each Project Challenge needs to have its own Challenge Advisor.

Will all submitted AI Studio Project Challenges be accepted?

Submitted challenges are not guaranteed to be accepted. Some challenges might not be accepted because the challenge is misaligned with our program goals, or because we have already secured more than the needed number of projects. In such cases, our program team will work to find other ways for your organization and its employees to get involved with Break Through Tech AI.

What are some of the benefits of hosting an AI Studio Project Challenge?

There are many benefits to partnering with us, both for our student participants and for your company, including:
- Provide underrepresented students with a portfolio-building experience that will directly help increase their internship and job readiness;
- Attract, engage, and get early access to recruit, skilled and diverse students who could be future members of your organization;
- Get access to proof-of-concept research, and/or initial ML models, to support existing or in-development products and tools; and/or
- Offer employees with AI/ML domain expertise a unique DEI volunteering and leadership development opportunity

What makes for a good AI Studio Project Challenge?

- Think of a "real-world" problem or opportunity that is relevant to your company and can be addressed with machine learning. It should be similar in scope to an undergraduate internship project (student participants will work in teams of 4-5 over ~3 months, in an extracurricular capacity).
- Be able to provide specific data sources for the students to use (i.e., no web scraping or data collection to be done on the part of the students).
- Pick a challenge that is not confidential or too strategic, and will be ok for students to publicly share (e.g., via GitHub or Linkedin). AI Studio projects are meant to serve as "portfolio artifacts" for our student participants to use as part of their internship or job search process.

- Challenges that require the use of confidential data, require access to internal systems, etc., should be avoided. Public datasets - or datasets from your organization that have been cleaned of any confidential, proprietary, protected, and personal information, etc., and would be ok for students to share publicly as part of showcasing their project work - are often good options.

What are some examples of past AI Studio Project Challenges?

You can find some examples of past AI Studio Project Challenges from 2021 here and from 2022 here.

What are some examples of companies or organizations that have hosted an AI Studio Project Challenge?

View a full list of our AI Studio Industry Partners here

What technical skills will the students have prior to working on their AI Studio Project Challenge?

Most of our student participants are undergraduate Computer Science, Engineering, or other STEM majors, in their sophomore or junior year at college. Most also have at least 1-2 years of programming experience (including past experience in Python), and have taken courses in Calculus, Statistics, Linear Algebra, Intro to Programming, and/or Databases. To further prepare them for AI Studio, Break Through Tech AI student participants complete a 9-week, skills-based Machine Learning course in eCornell over the summer, where they leverage industry-relevant tools and Python libraries to get hands-on experience with data exploration and data prep; training and evaluating ML models; and other aspects of the machine learning project lifecycle.

What are the requirements for being an AI Studio Challenge Advisor?

Challenge Advisors should have hands-on professional experience and domain expertise in data science and AI/ML (and, ideally, be actively working in the field). Additionally, Challenge Advisors should be excited at the prospect of assisting in the growth and development of women and other underrepresented groups in tech. They should be able to commit to meeting with a team of students for one hour every 2 weeks - and to attending at least one "Maker Day" in-person, to sit with their team of students and provide support as they work on their project (assuming this is feasible, given their location). Ideally, Challenge Advisors will be located near the program site that they have volunteered to support (NYC, Boston, or Los Angeles; does not apply for the Virtual program). Note: Each student team will also receive support from a graduate student "TA" from their program's host university, who will be connected with the team's assigned Challenge Advisor at the outset of the program.

Is AI Studio a fully virtual experience, or are there opportunities for in-person engagement?

In addition to the in-person AI Studio kickoff event in August, every month from September to November we host on-campus Maker Days to provide student teams with dedicated time to work together on their AI Studio project while receiving support from their graduate student advisor. Maker Days include guest speakers; skills workshops that align with specific aspects of the machine learning project lifecycle; and opportunities for community building and career development. AI Studio Challenge Advisors are asked to join at least one Maker Day to meet face-to-face with their student team. There are also other opportunities built into the AI Studio program to allow for in-person engagement between student participants and their host company. (For example, we'd love for your company to host its student team(s) for an in-person office visit or tour!)

What is the mission and impact of the Break Through Tech AI program?

AI Studio is one of the components of the Break Through Tech AI program, which also offers a summer Machine Learning course and Career Development / Mentorship. Break Through Tech AI helps college women and non-binary students in tech gain the skills and experience they need to get jobs in data science, machine learning, and artificial intelligence. Developed with industry leaders, our free program teaches students the skills to build AI solutions in real-world conditions; enables them to develop a portfolio of projects that demonstrate their capabilities; and provides career development and mentorship to help launch their careers.

What colleges do Break Through Tech AI student participants attend?

Cornell Tech, MIT's Schwarzman College of Computing, and UCLA's Samueli School of Engineering have collaborated with us to host the extracurricular Break Through Tech AI for students attending colleges in their respective regions. We also have a virtual program. Some examples of colleges that our student participants attend include:

- New York City: The City University of New York (multiple CUNY colleges represented), The Cooper Union, Hofstra University, New Jersey Institute of Technology, Rutgers University, Stevens Institute of Technology
- Boston: Mount Holyoke College, Northeastern University, Olin College of Engineering, Salem State University, Smith College, University of Massachusetts, Wellesley College
- Los Angeles: Cal Poly Pomona, California State University (multiple CSU colleges represented), Santa Monica College, University of California (multiple UC system colleges represented), Whittier College