

THE OFFICIAL PARTICIPANT GUIDE

Veritas AI International High School Hackathon

> 48 hours. One AI project. Built from scratch. ■

Nov 14–15

Hacking weekend (ET)

48 hrs

On the clock

1–3

Hackers per team

Free

Fully virtual, worldwide

highschoolhackathon.org

Questions? contact@veritasai.com

Finals & awards

Saturday, November 21, 2026

WELCOME, BUILDER

Hey, and welcome to the first Veritas AI International High School Hackathon!

On November 14 and 15, high schoolers from all over the world will spend one weekend building AI projects from scratch, and we're really glad you're one of them.

This guide walks you through everything: what to set up before Saturday, how to pick an idea you can actually finish, the tools and datasets worth using, how judging works, and what to submit.

Never built anything with AI? Totally fine. Plenty of great hackathon projects come from first-timers who picked a small problem and saw it through. If you're new, start with sections 2 and 7 and catch both workshop recordings. If you've trained models before, sections 8 and 9 on judging and submission are where to spend your time.

Keep this guide open all weekend and tick off the checklists as you go. Got a question? Email us at contact@veritasai.com. We're happy to help.

See you at kickoff,
The Veritas AI team

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01 Key dates and format

Hacking runs all day Saturday, November 14 and Sunday, November 15 (ET). The challenge briefs for each track drop live at the kickoff call, so everyone starts at exactly the same moment.

Format	Free and fully virtual, open to high school students anywhere in the world
Teams	Individuals or teams of up to 3. Teammates can be from different schools and countries
Tracks	AI + Health, AI + Finance, AI + Climate, and others listed on the hackathon website . You choose your track at kickoff
Submission	Working code, a short write-up and a demo video of up to 2 minutes
Judging	Round 1 is reviewed blind by our team. Finalists present live to a panel of AI researchers
Awards	An AI internship with a partner AI company for the Gold team, scholarships of up to 100% to Veritas AI programs, category awards for Best Beginner Build, Best AI for Good and Judges' Choice, and Merit Awards. Scholarships are awarded to each member of a winning team. Every participant who submits receives a certificate, and winning projects are featured on veritasai.com

Key dates

- Oct 5 ○ Registration opens
- Oct 17 ○ Workshop 1: Intro to Google Colab
- Nov 1 ○ Workshop 2: How to Scope a Weekend AI Project
- Nov 13 ○ Registration closes at 11:59 PM ET, and the pre-event kit arrives
- Nov 14–15 ● Hackathon weekend**
- Nov 18 ○ Finalists announced
- Nov 21 ○ Live finals and awards ceremony
- Dec 6 ○ Last day for award winners to claim scholarships (11:59 PM ET)

02 Before the hackathon

Get your setup sorted before Saturday so the whole weekend can go to building. Try to get through this checklist by Friday, November 13.

Setup checklist

- ☐ Sign in to [Google Colab](#) and run a single cell to check it works
- ☐ Create a [GitHub](#) account. Students can also get free tools through the [GitHub Student Developer Pack](#)
- ☐ Create a [Kaggle](#) account for datasets and free notebooks
- ☐ Create a [Hugging Face](#) account for pretrained models and free app hosting
- ☐ Test a screen recorder with your microphone (see section 5)
- ☐ Complete your team's registration with every teammate listed. You can edit it until registration closes on November 13 at 11:59 PM ET
- ☐ Attend or watch Workshop 1 (Intro to Google Colab, October 17) and Workshop 2 (How to Scope a Weekend AI Project, November 1). Recordings are emailed to all registrants
- ☐ Open the pre-event kit when it arrives on Friday evening. It includes the starter notebooks, the submission checklist and the kickoff link

Planning as a team

Hacking with friends? Agree on a few things before the clock starts:

- Roles. For a team of three, it often works well for one person to focus on the data, one on the model, and one on the demo and write-up
- How you'll stay in touch, for example a group chat and one video call link you all use
- Where your code will be kept. A single shared Colab notebook or GitHub repository means everyone works from the same version
- When you'll sleep. Seriously, plan it now

What's fine to do before kickoff

Go ahead and learn the tools, play around with the starter notebooks, and browse datasets for the tracks you're eyeing. Just save the actual building for the weekend itself.

03 Choosing your project

Two days goes by fast, so pick an idea small enough to get working by Saturday night. Judges need to see your project running, and you can always add to it on Sunday.

A QUICK TEST FOR ANY IDEA

Before you start coding, try completing this sentence:

“Our project helps [a specific person] by taking [an input] and giving back [an output].”

If you can't fill in all three parts, the idea probably needs more thought.

Questions to ask about an idea

- 1. Is there data you can use?** If you can't find a suitable dataset within about 30 minutes, it's usually better to pick another idea. Building a dataset from scratch takes up most of a weekend.
- 2. Can a simple model make progress on it?** Start with something straightforward, such as a logistic regression, a small decision tree or a pretrained model from Hugging Face.
- 3. Can you demonstrate it in two minutes?** A judge should be able to watch an input go in and a result come out.
- 4. Who would it help?** Be ready to explain who would use it and why.

Examples of scoping an idea

TOO BROAD FOR A WEEKEND	A REALISTIC VERSION
"An AI doctor that diagnoses any disease"	A model that flags possible pneumonia on chest X-rays from one public dataset, with its accuracy and the cases it gets wrong
"Predict the stock market"	A test of whether news-headline sentiment helps predict next-day price moves for five stocks, reported honestly either way
"Solve climate change with AI"	A forecast of tomorrow's solar output for one region from weather data, compared against a simple baseline

"A chatbot for mental health"

A mood journal that tags entries by emotion using a pretrained classifier and charts the week

Project ideas

These are based on projects Veritas AI students have built before. Use them for inspiration, but the challenge brief you receive at kickoff comes first.

Health

Classify chest X-rays or images of skin lesions, predict hospital readmissions from patient data, or recognise sign language from webcam images

Finance

Forecast cryptocurrency returns against a buy-and-hold baseline, detect unusual card transactions, or build a loan-risk model and check it for bias

Climate

Predict solar or wind generation from weather data, forecast a building's energy use, or detect deforestation or changes in water quality from satellite images

Other areas

Predict match results from sports statistics, apply art styles to photos with computer vision, or test whether AI-generated music affects listeners' mood

Some of the most memorable projects come from something the team genuinely cares about, like air quality in your city, a clinic near you, or a sport you play.

04 Planning your 48 hours

Here's a rough game plan. Aim to have a basic version working end to end by Saturday night, then use Sunday to make it better and get your submission ready. Adjust it however suits you or your team.

WHEN	GOAL	DONE WHEN
<i>Sat · first 2 hrs</i>	Read the brief, choose an idea and find a dataset	Your idea passes the one-sentence test and the data loads in your notebook

WHEN	GOAL	DONE WHEN
<i>Sat · midday</i>	Explore the data and build a baseline	You have a simple result to beat, such as always predicting the most common class
<i>Sat · afternoon</i>	Train your first model	It beats the baseline, and you've noted by how much
<i>Sat · evening</i>	Connect input to output	Someone can enter new data and see a result, even if it looks rough
<i>Sat · night</i>	Sleep	At least 7 hours. Your Sunday self will thank you
<i>Sun · morning</i>	Make one improvement	One change is made, such as better features, a different model or cleaner data, and its effect is measured
<i>Sun · midday</i>	Prepare the demo	The demo runs from start to finish without any fixes
<i>Sun · afternoon</i>	Write up and record	The write-up is finished and the demo video is uploaded
<i>Sun · final 2 hrs</i>	Submit	Your project is submitted, with time left for small fixes

Tips for the weekend

- Stop adding new features about six hours before the deadline, and use the remaining time for fixes and your submission
- Save your work regularly, either by committing to GitHub or saving a copy of your Colab notebook every couple of hours
- Keep brief notes on what you tried and how it went. They'll make the write-up much easier
- If you've been stuck on the same problem for 30 minutes, ask a mentor for help, simplify your approach or try a different dataset. Don't lose hours to one bug

05 Tools

Everything here is free to get started with. Pick one setup and stick with it for the weekend, so you're building instead of learning a new tool from zero.

Recommended setups

EXPERIENCE	WHERE TO CODE	MODEL TOOLS	DEMO
New to coding	Google Colab with the starter notebooks	Teachable Machine , which needs no code, for image, sound or pose models	A screen recording of the model working
Some Python	Google Colab	scikit-learn for tabular data and pandas for cleaning it	A simple interface built with Gradio inside Colab
Built models before	Colab or Kaggle Notebooks with a free GPU, plus a GitHub repository	PyTorch or Hugging Face Transformers with pretrained models	An app hosted on Hugging Face Spaces or Streamlit

Pretrained models and AI APIs

- The [Hugging Face Hub](#) has thousands of pretrained models for text, images and audio. Fine-tuning an existing model is usually much faster than training one from scratch
- [Google AI Studio](#) provides Gemini API keys with a free tier
- The [Claude](#) and [OpenAI](#) APIs are paid, but are an option if your team already has access
- If your project uses an AI API, judges will be most interested in what you've built around it, such as your data, how you evaluated the results and your interface

Computing power

Google Colab and Kaggle both offer free GPU time, which is enough for most hackathon projects.

Recording your demo

Use [OBS Studio](#) (free on all platforms), [Loom](#) or your computer's built-in recorder. Upload to YouTube as unlisted, or to Google Drive with "anyone with the link can view".

06 Datasets

These public sources are a great place to start hunting for data. Before you commit to a dataset, check its licence and make sure it isn't too big to work with in a weekend.

Working with your data: look through a sample of rows or images yourself before training anything, since it's the easiest way to spot missing or mislabelled data. Split your data into training and test sets before you start tuning, and don't use the test set for tuning. Cite every dataset you use in your write-up, with a link.

TRACK	SOURCE	GOOD FOR
<i>Any</i>	Kaggle Datasets	Ready-to-use CSVs and images, often with example notebooks
<i>Any</i>	Hugging Face Datasets	Text, image and audio datasets that load in one line of code
<i>Any</i>	UCI Machine Learning Repository	Small, clean tabular datasets, ideal for first models
<i>Any</i>	Google Dataset Search	Finding a dataset on a niche topic
<i>Any</i>	Our World in Data	Country-level data on health, energy, poverty and more
<i>Health</i>	MedMNIST	Small, standardised medical image sets (X-rays, pathology, skin) that train fast
<i>Health</i>	Chest X-Ray Images (Pneumonia)	A classic first image classifier
<i>Health</i>	UCI Heart Disease	Tabular risk prediction
<i>Health</i>	WHO Global Health Observatory	Global health indicators by country
<i>Finance</i>	FRED	Interest rates, inflation, unemployment and other economic time series
<i>Finance</i>	yfinance	Historical stock prices in Python (unofficial, fine for learning)
<i>Finance</i>	Credit Card Fraud Detection	Imbalanced classification, a good test of honest evaluation
<i>Finance</i>	World Bank Open Data	Development and economic data by country
<i>Climate</i>	NASA POWER	Solar radiation and weather by location, built for renewable energy work

TRACK	SOURCE	GOOD FOR
<i>Climate</i>	Open-Meteo	Free weather forecast and historical weather API, no key needed
<i>Climate</i>	OpenAQ	Air quality readings from monitors worldwide
<i>Climate</i>	Climate TRACE	Greenhouse gas emissions by sector and facility
<i>Climate</i>	Global Forest Watch	Deforestation and land-use data

07 Learning resources

You've got about five weeks between registration opening and kickoff. Pick the level that sounds like you and work through the list in order. Everything here is free.

Beginner: new to machine learning

1. Veritas AI Workshop 1, Intro to Google Colab (October 17). The recording is emailed to all registrants
2. [Kaggle Learn: Python](#), followed by [Intro to Machine Learning](#). Both are short, hands-on courses that run in your browser
3. [3Blue1Brown: Neural Networks](#), a clear visual explanation of how neural networks learn
4. [Teachable Machine](#), which lets you train an image model in a few minutes without writing code
5. The starter notebooks in your pre-event kit

Intermediate: some Python and a first model

1. Veritas AI Workshop 2, How to Scope a Weekend AI Project (November 1), and its planning template
2. [Google Machine Learning Crash Course](#)
3. [Kaggle Learn: Pandas](#) and [Intermediate Machine Learning](#)
4. [scikit-learn tutorials](#)
5. [Harvard CS50's Introduction to AI with Python](#)

Advanced: ready to go further

1. [fast.ai Practical Deep Learning for Coders](#)
2. [PyTorch tutorials](#)
3. [Hugging Face courses](#) on language models, fine-tuning and more
4. [Andrej Karpathy: Neural Networks: Zero to Hero](#)

For everyone: if you're working in a team, [GitHub Skills](#) is a quick way to learn Git and GitHub through short interactive exercises. It makes working on the same code together much easier.

08 Judging

Projects are scored on four criteria: technical quality, impact, creativity and clarity. Round 1 is reviewed blind by our team, so reviewers see your project but not your name or school. Finalists then present live to a panel of AI researchers.

CRITERION	WHAT JUDGES LOOK FOR	HOW TO SHOW IT
Technical quality	Whether the project works, the approach is sound and it was tested fairly	Compare against a baseline, report results on test data the model hasn't seen, and show where it fails
Impact	Whether it addresses a real problem for real people	Explain who it helps and what would change for them
Creativity	Whether it takes a fresh approach rather than repeating a standard tutorial	Apply a known technique to an unusual dataset, question or group of users
Clarity	Whether a judge can understand the project in two minutes	A clear demo, a concise write-up and one main takeaway

What makes a project stand out

- They're open about their limitations. For example, "our model is 84% accurate, but it misses many cases in darker skin tones because the dataset includes few of them" is more convincing than an unexplained 99%
- They compare their results against a simple baseline
- The demo runs reliably from start to finish
- They explain the reasoning behind their choices: why this problem, this model and these results

Common mistakes to avoid

- Results that look too good to be true, which often means test data has leaked into training
- Reusing a tutorial dataset without asking a new question of it
- A write-up that lists the tools used but not what the team learned
- Links that judges can't open. Check your sharing settings in a browser where you're logged out

09 Submitting your project

Submissions close on Sunday, November 15 at [time ET]. One person submits for the whole team, and you'll need three things: working code, a short write-up and a demo video.

Submission checklist

- ☐ Your code, as a Colab notebook or GitHub repository that anyone with the link can view. Test the link in a browser where you're logged out
- ☐ A short write-up covering the problem, your approach, your results and what didn't work, using the template below
- ☐ A demo video of up to two minutes, uploaded to YouTube as unlisted or shared from Google Drive
- ☐ The names of all team members
- ☐ Citations for every dataset, model and code source you used

Write-up template

You can copy this into your README or the submission form.

Project name

****Track:**** Health / Finance / Climate / ...

****Team:**** names

The problem

Who has this problem, and why does it matter? (2-3 sentences)

What we built

What goes in, what comes out, and how someone would use it.

How it works

Data: which dataset, how many examples, how we cleaned it.

Model: what we used and why.

Results

Our baseline scored X. Our model scored Y on held-out test data.

Where it fails, and why we think so.

What we'd do next

One or two concrete next steps with more time.

Sources

Datasets, pretrained models, tutorials and AI tools used, with links.

Demo video

This structure works well for a two-minute video:

- 1. The problem** (about 15 seconds): who it's for and why it matters
- 2. The demo** (about 60 seconds): a real input going in and the result coming out
- 3. How it works** (about 30 seconds): your data, your model and how it compares to the baseline
- 4. Next steps** (about 15 seconds): one limitation and what you'd do next

A screen recording with your voice over it is all you need. It helps to write a short script first, and there's no need to spend long on editing.

THE FINALS

Made the finals? Congrats! Finalists are announced on November 18 and demo live on November 21. Each team gets five minutes to present, followed by questions from the judges.

- Follow the same structure as your video, with more time on the demo and your results
- Run the demo live if it's reliable, and keep a recorded version open as a backup
- Be ready for questions such as "How do you know it works?", "What would cause it to fail?" and "Who would use this?"
- If you're in a team, agree beforehand who will answer which kinds of questions

10 Rules and responsible AI

The rules are simple: build your project during the weekend, credit anything you didn't make yourself, and be honest about your results.

Using AI tools

You may use coding assistants and AI chatbots while you build, as long as your team understands every part of the project and can explain it to the judges. Please list any AI tools you used in your write-up.

Crediting sources

Public datasets, pretrained models, open-source libraries and tutorial code are all allowed, as long as they're cited. Submitting someone else's project as your own will lead to disqualification.

Building responsibly

- Use public or synthetic data, and don't collect anyone's personal information without their permission
- Check whether your model performs equally well across different groups, and say so if it doesn't

- Make clear that health and finance projects are prototypes, not medical or financial advice
- Report the results you actually achieved, including any that were disappointing

Teams

Teams can have one to three high school students. Anyone on the team can work on any part of the project, and everyone listed should have contributed.

11 After the hackathon

Submitting is just the start. Here are a few ways to keep going with what you've built:

- Tidy up your GitHub repository, add your write-up as the README and pin it to your profile, so you can link to it in applications
- Share your certificate on LinkedIn and tag Veritas AI
- Use the judges' feedback to plan a second version, with more data, a stronger evaluation or testing with real users
- Enter [Singularity, the Veritas AI essay contest](#), which opens on November 15 and closes on February 7
- Continue your project as independent research through a Veritas AI program, working one-on-one with a mentor from a top graduate program. Award winners have until 11:59 PM ET on December 6 to claim their scholarships

12 Frequently asked questions

Do I need AI or coding experience?

No. The workshops, starter notebooks and this guide are built for first-timers, and there's a Best Beginner Build award.

Does it cost anything?

No. Registration is free.

Can my teammates be from other schools or countries?

Yes. Teams are 1 to 3 high school students from anywhere.

Do I need to pick a track when I register?

No. Challenge briefs are revealed at kickoff, and you choose then.

What if I miss the kickoff call?

The recording and the challenge briefs are emailed to all registrants right after.

Is the internship remote?

Yes.

Can I keep working on my project after submitting?

Yes, but judges only see what you submitted by the deadline.

Who do I contact?

Email contact@veritasai.com or visit highschoolhackathon.org.

Veritas AI International High School Hackathon 2026
highschoolhackathon.org

Good luck, and happy hacking.
The Veritas AI team