Hack Club Stardance Challenge

June 1 - October 31, 2026 · in partnership with NASA

Impact Report for Challenger Center

Data as of November 5, 2026

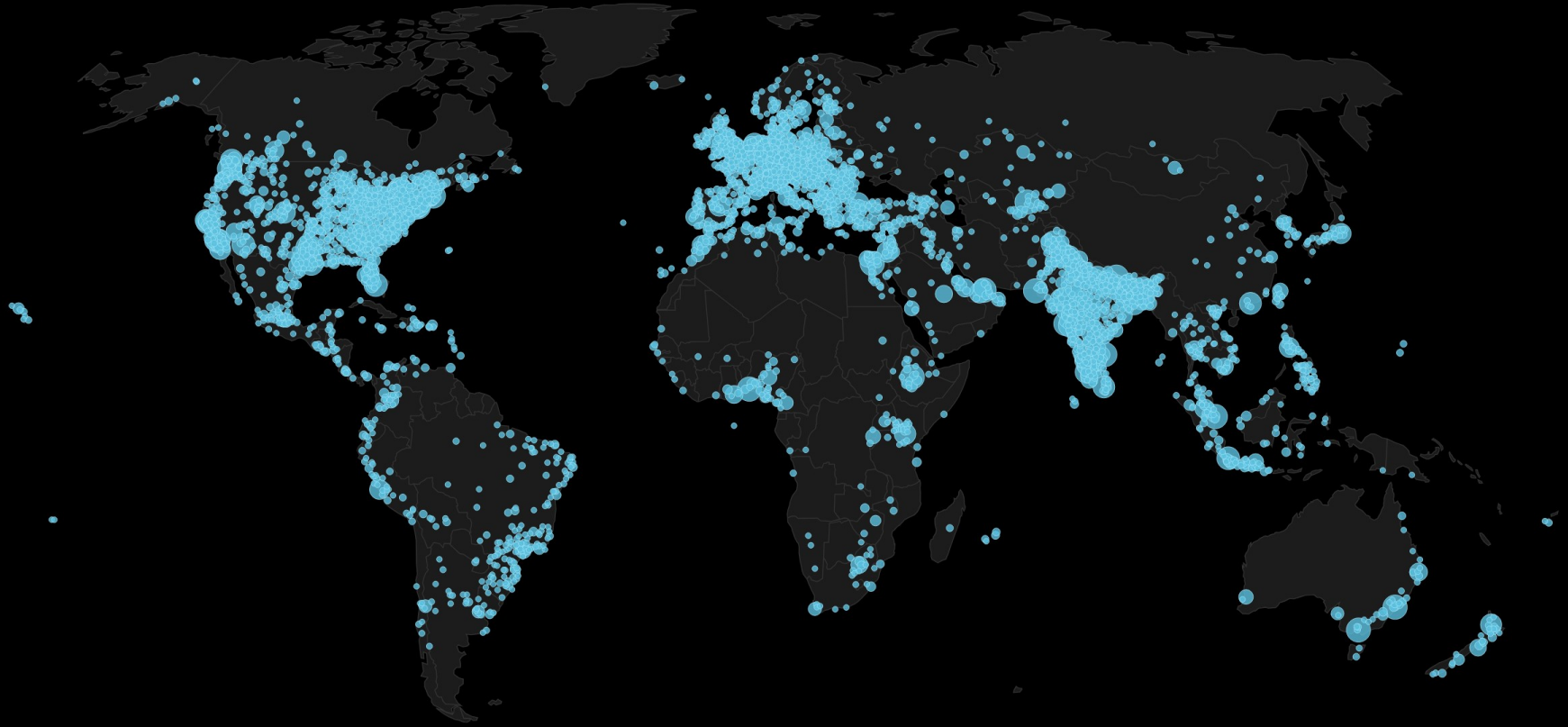
The Stardance Challenge was one of the biggest high school engineering challenges in American history

- **71,257** teenagers (ages 13-18) signed up, **22,098 of which are American, from all 50 states and DC**; the rest came from **180+ countries and territories** around the world.
- **61,555** projects created, and **7,375** projects shipped publicly, each with a working demo and an open-source repo.
- **168,264** hours of tracked engineering time on projects (that's **19.2 years** of nonstop making)!
- **59,725** public build logs and **73,275** peer reviews. In the Stardance Challenge, teenagers reviewed other teenagers' work and gave feedback on the projects that shipped!

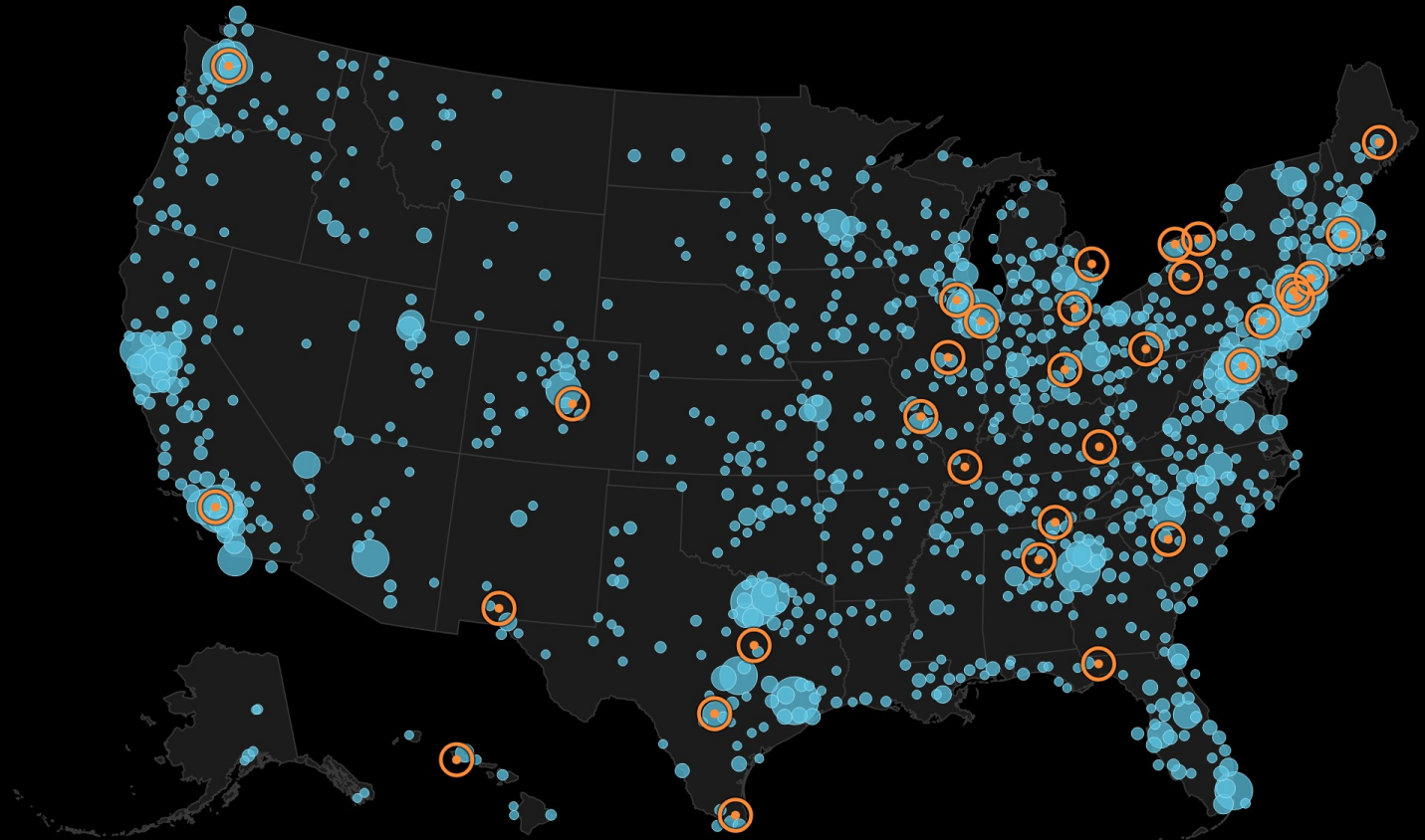








71,257 teens from around the world signed up for the Stardance Challenge.



22,098 American teenagers from all 50 states + DC signed up
About 10,000 of them live within 50 miles of a Challenger Learning Center (orange rings)

81% of the teenagers who shipped a project in Stardance had never shipped with Hack Club before.

Teenagers who built during Stardance spent **2.7×** more time per week making projects than in the three months before it

How Challenger Center and Hack Club worked together to inspire the next generation of explorers

- **Two partnership agreements**: the first signed in December 2025, the second for Stardance in June 2026.
- **January 30**: together we launched Hack Club's first-ever space challenge, inside our winter program, Flavortown. Teens submitted **211 projects**.
- **April 18**: Dr. Jim Green, NASA's former Chief Scientist, took teens' questions live. "oh my god that was the coolest ama ever," one wrote. Another: "hc should have a whole NASA AMA series." This summer, Stardance had one.
- **June 1**: the Stardance launch emails, sent to about 3.2 million students, named Challenger Center alongside NASA and Kennedy Space Center for "once-in-a-lifetime prizes that money can't buy," including the chance to meet an astronaut.
- **stardance.hackclub.com** has listed Challenger Center with NASA, AMD and GitHub in its partner section since launch.
- **September 15**: Dr. Mamta Patel Nagaraja, NASA's former Associate Chief Scientist, answered teens' questions live for an hour. The recording is on Hack Club's YouTube channel.
- **Behind the scenes**: Mike and Mamta's advice on working with NASA, starting with our planning call in March, helped shape the challenge.



Stardance AMA: Dr. Mamta Patel Nagaraja, Sep 15


Hack Club AMA: Dr. Jim Green, April 18



Partner section of stardance.hackclub.com

Challenger Center's target student outcomes	What Hack Club's Stardance Challenge delivered
STEM Career Awareness: "Increase student awareness of STEM careers"	Live Q&As with NASA's Administrator, a NASA flight director and **Dr. Mamta Patel Nagaraja**, plus answers from the ISS by astronaut Anil Menon.
STEM Identity: "Develop students' sense of belonging in STEM"	**59,725** public build logs and **73,275** peer reviews: teens sharing their work with, and getting feedback from, other teens who build.
STEM Engagement: "Develop student engagement in STEM"	**71,257** teens signed up, 77% of them new to Hack Club. **8,076** logged **168,264** hours of engineering, at **2.7×** their weekly pace before Stardance.
STEM Self-Efficacy: "Develop students' feeling that they can 'do STEM'"	**7,375** projects shipped publicly. **81%** of teens who shipped had never shipped with Hack Club before; **62%** of sign-ups had little or no coding experience.
21st Century and Social-Emotional Learning Skills: "Develop student communication, collaboration, and problem-solving abilities"	Each shipped project needed a working demo and an open-source repo, then went to other teens for review. **15,900** hardware projects, backed by **1,545** micro grants.





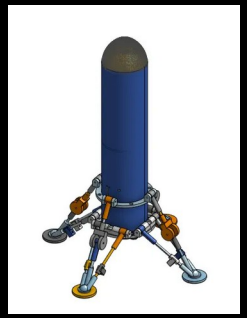


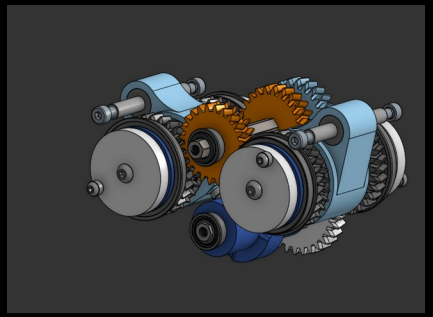
Hack Club’s first space challenge, launched with Challenger Center in January, drew 211 projects. This summer, teenagers shipped 7,375 in Stardance.

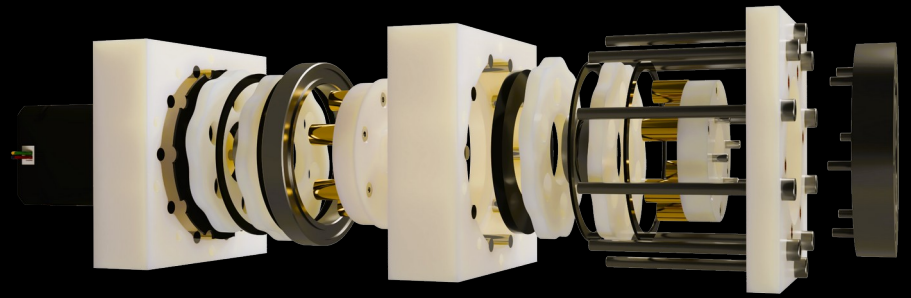
Source: Hack Club project data, January 30 - October 31, 2026

Project highlights: aerospace & hardware, built by American teenagers

- **Prometheus**: a sub-$600 autonomous wildfire-spotting quadcopter: custom flight-controller PCB (KiCad), Onshape chassis, a self-trained vision model. 155 hours. Age 14, California
- **Silverflame**: a thrust-vector-control model rocket designed to land propulsively, Falcon 9 style. Age 16, Washington
- **Geared reversible CVT**: a fully geared, bi-directional continuously variable transmission; 202 hours of mechanical design. Age 16, California
- **Miniature Mars Rover**: printable and published for anyone to build. Age 14, California
- **SpaceMount**: an open-source astrophotography GoTo mount. Age 17, Idaho



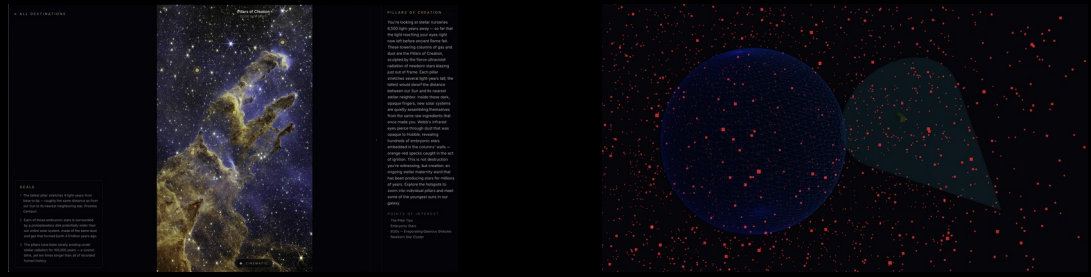




Projects built with open source NASA data from around the world

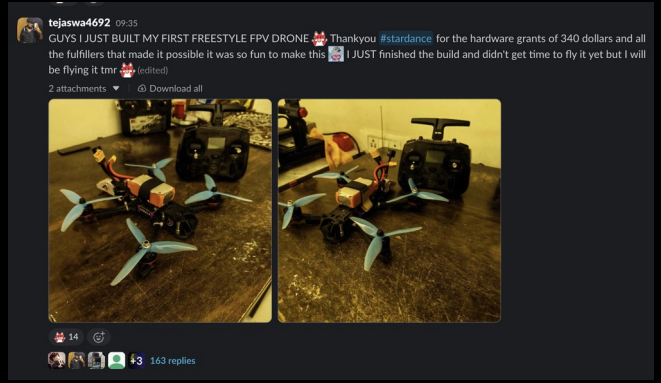
- **Orbital Eye**: an ISS and satellite pass predictor. Age 16, India
- **SpaceGuessr**: GeoGuessr, but with real NASA imagery. Age 15, Germany
- **Olympus Mons: The Voyage**: a rover simulator on real satellite height maps of Mars. Age 14, United Arab Emirates
- **Skywritten**: an “astronomical biography” of any date, assembled from four NASA archives. Age 17, Bangladesh
- **Eschatia**: a live James Webb Space Telescope archive explorer. Age 16, California
- **KesslerEdge**: an orbital physics simulation for autonomous debris avoidance, top 4%. Age 17, New York





Turning teenagers’ bedrooms into makerspaces

- **15,900** hardware projects created since the start of Stardance.
- **$142,783** worth of micro grants given to teenagers in 71 countries.
- **$52,028** of that went to American teens in 31 states.
- **18,213** prize items delivered to **7,377** teens: 3D printers, Raspberry Pis, soldering irons, PCB and 3D-printing credits, keyboards, etc.
- **Outpost**: 130 teens flown to a week-long “Manufactured in America” hardware hackathon in San Mateo, CA (July 14–20).









Thank you for helping change the lives of teenagers across the world!

Hack Club · hackclub.com · stardance.hackclub.com

Contact: Deven Jadhav (deven@hackclub.com), Chief of Staff, Programs

We asked teenagers what they thought of Stardance…
Here's what they said:

"I've always been fascinated by space, and I had been imagining a way to explore planets, moons, and missions interactively. Stardance gave me the perfect reason to stop planning and start building." Age 14, India

"I had no idea how to code, write a readme, or create a repository before this summer, and after the first night that I had finally shipped my first project, I felt tremendously proud. I just wanted to say that I am in absolute awe in what I was able to accomplish because of this program and thank you for that opportunity!!" Age 16, California

"as someone who wants to be an engineer more than anything it's very inspiring to see that not only are there so many people my age interested in this stuff but also that there are people that are older than us looking out for the next generation and helping us bring our ideas to life. thank you guys so much" Age 16, Nevada

"So far I like Stardance, and I really love that you partnered with NASA because I want to be an aerospace engineer someday." Age 14, Colorado

"he is so inspiring ngl, he just made me feel more excited about astronomy than anyone ever has." Age 15, India, after Dr. Jim Green's AMA

"Y'all are the best! Please do another space themed challenge soon, I love space!" Georgia