Hack Arizona
in partnership with the Arizona Hub for Agricultural Innovation

AFTER-EVENT REPORT

Hack Arizona AgX

Hacking the Future of Agriculture

Sunday, November 15, 2026 · Grand Challenges Research Building, University of Arizona, Tucson

In one day, 98 student builders from across Arizona formed 30 teams, took on two real problems from Arizona agriculture, and every team submitted a project to eight judges from the university and industry.

AT A GLANCE

98
student builders on site, 63% of the 156 registered

30 / 30
teams submitted a project. None dropped out

530+
hours of student work on two farm problems

5
Arizona campuses on site

127
students new to Hack Arizona's community

27%
women among registrants, and 26% on site

87
builders shared a resume

4.0 / 5
participant rating; 7 of 9 respondents want to return in March

connecto

The event platform and networking app

Registration, check-in, teams, project submission, judging and results for this event all ran on Connecto. Every figure in this report comes from that event data.

EVENT PAGE

getconnecto.app/agx-hackday

The challenges, the teams and the winners

SUMMARY

A full room, every team shipped, and clear lessons on who shows up

For every student, this report joins their registration answers, their history with Hack Arizona and what happened on the day, to show who came, who stayed home, and what the winning teams had in common.

Key findings

- **No team dropped out.** 30 teams of 2 to 4 started and all 30 submitted a project. 17 of them formed in Connecto before the day.
- **Faculty outreach worked best.** 71% of students who heard about AgX from a faculty member came, against 63% overall, and they filled 6 of the 10 places on award-winning teams.
- **Graduate students were the biggest gap.** 17 of 36 came (47%), against 66% of four-year undergraduates.
- **Women came at the same rate as men** (60% each) and were 26% of those on site, but none was on an award-winning team.
- **Agriculture was new to the room.** Nearly two thirds of builders study computing. None studies agriculture, and 6 study a related science.
- **The winners formed on the day,** between 7:28 and 9:29 AM, and mixed majors: 2 of their 9 members who named a field study computer science.

WINNERS

Spray or Wait?

1st **Above The Canopy**

Project: SMART

Run the Fleet, presented by American Tractor Company

1st **Team5**

Project: Farm ManAIgement

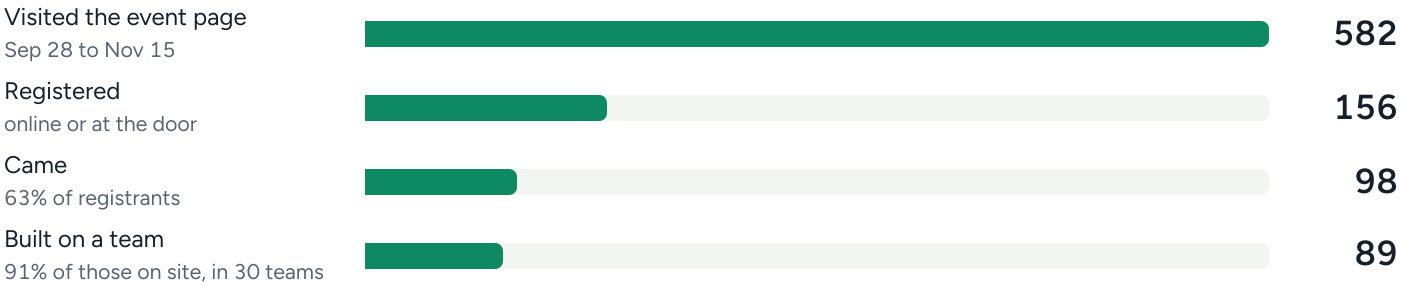
Run the Fleet

2nd **CHOPPA**

Project: FleetForeman

From first visit to building on a team

Walk-ins registered at the door, so not every registrant came through the web page.



What it means for each audience

Organizers

63% turnout and every team submitted. Judging ran 35 minutes over its slot and ASU students arrived late. The plan is on page 12.

University and funders

Students from UA, ASU, NAU and two community colleges in 38 fields; 27% women. Graduate turnout and women among winners are the gaps.

Sponsors

14 teams and 43 builders took the American Tractor challenge, all with a resume on file. 97 read the brief; ATC's judge scored every team.

Partners

aginnovationhub.org sent 9 registrations, nearly as many as Hack Arizona's own site. A participant wrote that teams "met real farmers".

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IMPACT

What one day produced

Six hours of hacking turned two problems from Arizona agriculture into 30 working prototypes. The event also left Hack Arizona with a larger community, and its sponsors with a pool of builders to follow up with.

WHAT WENT IN

1 day, with 6 hours of hacking

2 real problems from Arizona agriculture

8 judges from the university and industry

5 Arizona campuses on site: UA, ASU, NAU, Pima and Arizona Western

WHAT CAME OUT

30 prototypes from 30 teams, none dropped out: 16 spray-drift tools and 14 fleet coordinators

530+ hours of student work (89 builders for 6 hours)

28 teams linked their work: 24 GitHub repositories and 4 live demos

120 scored reviews from judges, 23 with a written note

WHAT LASTS

142 people new to Hack Arizona's community, 127 of them students

87 builders who shared a resume at registration

18 builders back from an earlier Hack Arizona event

7 of 9 feedback respondents want to join the March hackathon

AgX grew Hack Arizona's community by 63%

People in Hack Arizona's records, before and after the event



The 142 are 127 students and 15 judges, mentors and organizers. Returning students came at the same rate as new ones, 62 to 63%.

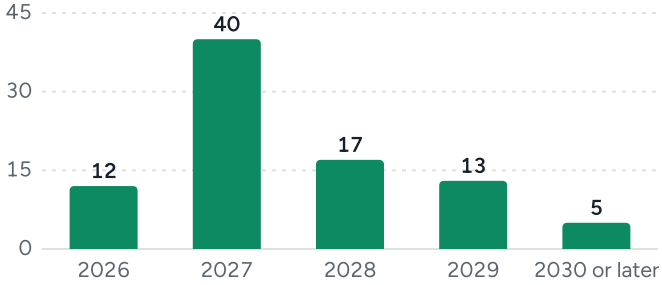
What the 98 builders on site shared

Given at registration, for sponsors and recruiters to follow up



When builders on site expect to graduate

87 who gave a date. Two thirds graduate in 2027 or 2028.



What students say they walked away with

> "We met real farmers built a real working project and made real connections."

> "I have a project for my git hub"

> "I really enjoyed the entire project. From coming up with an idea to using ai and resarch."

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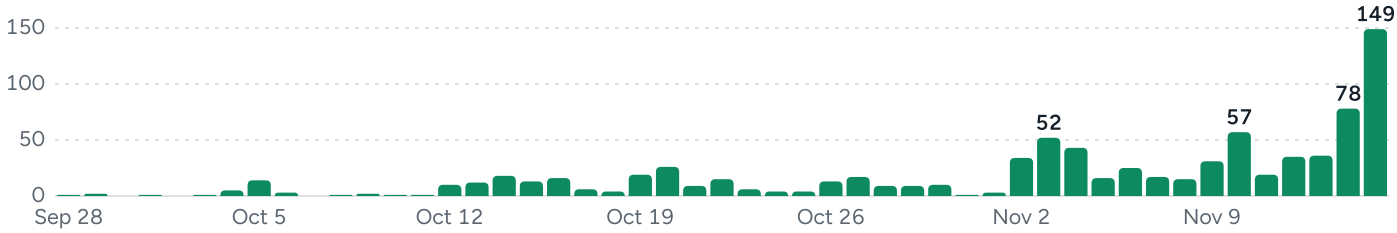
REACH AND REGISTRATION

582 people found the event; personal outreach brought them in

Visits rose in waves after each round of promotion and peaked on the day itself. A quarter of all registrations arrived in the final two days, and the students who registered last were the most likely to come.

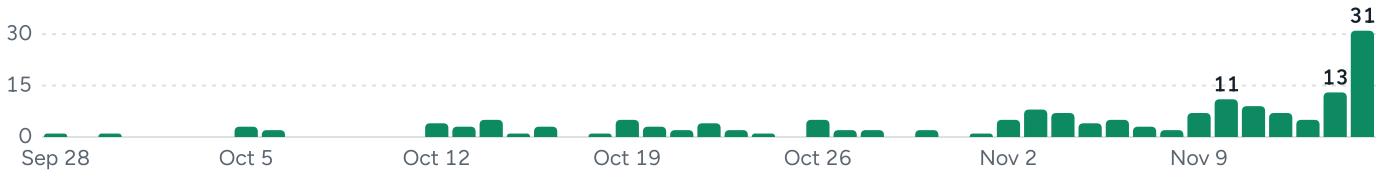
Visitors per day

People who opened the event on the web or in the app that day



Registrations per day

All registrations, including walk-ins and staff. Reminder emails went out on Nov 12, 13 and 14.



How they heard about it, and who came

156 registered students. Light bar: registered. Dark bar: came.

Friends	**56%**	24 of 43
University email	**62%**	18 of 29
Faculty or instructor	**71%**	17 of 24
Social media	**55%**	12 of 22
AgX and other	**56%**	5 of 9
Walk-ins and invited	**76%**	22 of 29

When they registered, and who came

156 registered students. Light bar: registered. Dark bar: came.

More than 2 weeks before	**56%**	28 of 50
3 to 14 days before	**63%**	40 of 64
1 to 2 days before	**63%**	10 of 16
On the day	**77%**	20 of 26

Websites and links that sent visitors

Visits from another site or a tracked link, per person per day

google.com	64
hack.arizona.edu	37
Instagram	32
aginnovationhub.org	30
Newsletter link	28
UA course pages (D2L)	14

Where web visitors were

Approximate location, from each visitor's network address

Tucson	330
Phoenix area	190
Flagstaff	17
Yuma	6

Tucson is home to UA, the Phoenix area to ASU, and Flagstaff to NAU. Registrations by source: Hack Arizona's site 10, the Hub's site 9, search engines 13.

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DIVERSITY AND REPRESENTATION

Who registered, who came, and who won

Each student's registration answers are followed through to the day. In every chart the light bar is how many registered and the dark bar how many came. Figures cover the 143 students who used the form; groups are small, so one or two students move a rate by several points.

Women at each stage

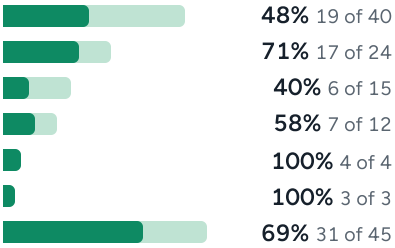
Share of students who gave a gender (113 at registration)



27%	26%	27%	0%
Registered 30 of 113	Came 18 of 68	On a team 18 of 67	Award team 0 of 8

Women and men both came at 60%. 11 of the 30 teams included a woman. 30 registrants gave no gender.

Race and ethnicity, as students described themselves



South Asian	**48%** 19 of 40
White	**71%** 17 of 24
East, Southeast or Central Asian	**40%** 6 of 15
Hispanic or Latino, or Guamanian*	**58%** 7 of 12
Middle Eastern	**100%** 4 of 4
Black or African	**100%** 3 of 3
No answer	**69%** 31 of 45

*The form stored these two answers as one value, so they cannot be told apart.

School



University of Arizona	**61%** 62 of 101
Arizona State University	**53%** 16 of 30
Northern Arizona University	**78%** 7 of 9
Community colleges	**67%** 2 of 3

Level of study



Undergraduate, 4-year	**66%** 54 of 82
Graduate or postdoctoral	**47%** 17 of 36
Community college	**67%** 10 of 15
High school or not a student	**60%** 6 of 10

Age



Under 21	**60%** 30 of 50
21 to 23	**68%** 40 of 59
24 to 26	**64%** 9 of 14
27 and over	**40%** 8 of 20

New or returning

All 156 registrants. Fields of study are on the next page.



New to Hack Arizona	**63%** 80 of 127
Returning from an earlier event	**62%** 18 of 29

What stands out

- **Turnout was even across gender, but results were not.** Women were on 11 teams and none of the three award teams.
- **Graduate students and students aged 27 and over came least,** at 47% and 40%. About half of the South Asian registrants were graduate students, which explains most of that group's 48%.
- **NAU sent the fewest students and the most winners:** all 7 who came were on award teams. 17 registrants live outside the US, and 11 of them came.

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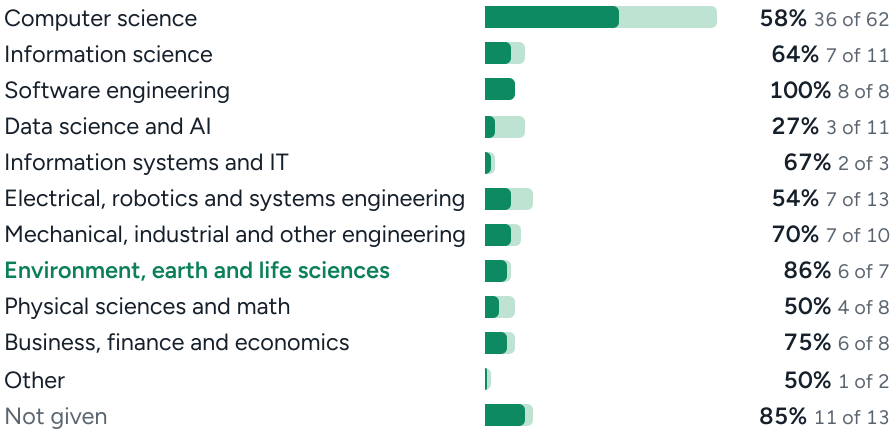
FIELDS OF STUDY

27 fields of study in the room, and six builders close to agriculture

Of the 87 builders who named a field, nearly two thirds study computing. None studies agriculture itself, and 6 study a related environmental, earth or life science.

Field of study, registered and came

156 registered students. Light bar: registered. Dark bar: came.



Closest to agriculture

0
builders on site study agriculture

6 of 98
study an environmental, earth or life science

4 teams
included one of the six, and all four finished in the top half

1st place
in Run the Fleet, for a team with two environmental engineering students

Every field named by builders on site

87 builders, 27 fields, with the number of builders in each. Green: the six from environmental, earth and life sciences.

Computer science 36 · Software engineering 8 · Information science 7 · Data science 3 · Finance 3 · Industrial engineering 3 · Robotics 3 · Electrical and computer engineering 2 · Environmental engineering 2 · Management information systems 2 · Mechanical engineering 2 · AI, biology and GIS 1 · Aerospace engineering 1 · Applied physics 1 · Astronomy and astrophysics 1 · Biochemistry 1 · Biomedical engineering 1 · Business 1 · Computer engineering 1 · Ecology and evolutionary biology 1 · Economics 1 · Hydrology and atmospheric sciences 1 · Immersive media and games 1 · Neuroscience 1 · Optical sciences 1 · Retailing and consumer science 1 · Systems engineering 1

Spellings of the same field are combined. Plant science, the one agriculture field, was named by a registrant who did not come. 11 builders named no field.

What it means

AgX reached students agriculture rarely reaches. 81 of the 87 builders who named a field study something else, and nearly all of them built on a farm problem.

The mix differed by school. 43 of 62 UA builders and 12 of 16 from ASU study computing. None of NAU's 7 do, and they were on two of the three winning teams.

Agriculture students are the gap. Recruiting through agriculture, plant science and environmental science departments would put that knowledge on teams in March.

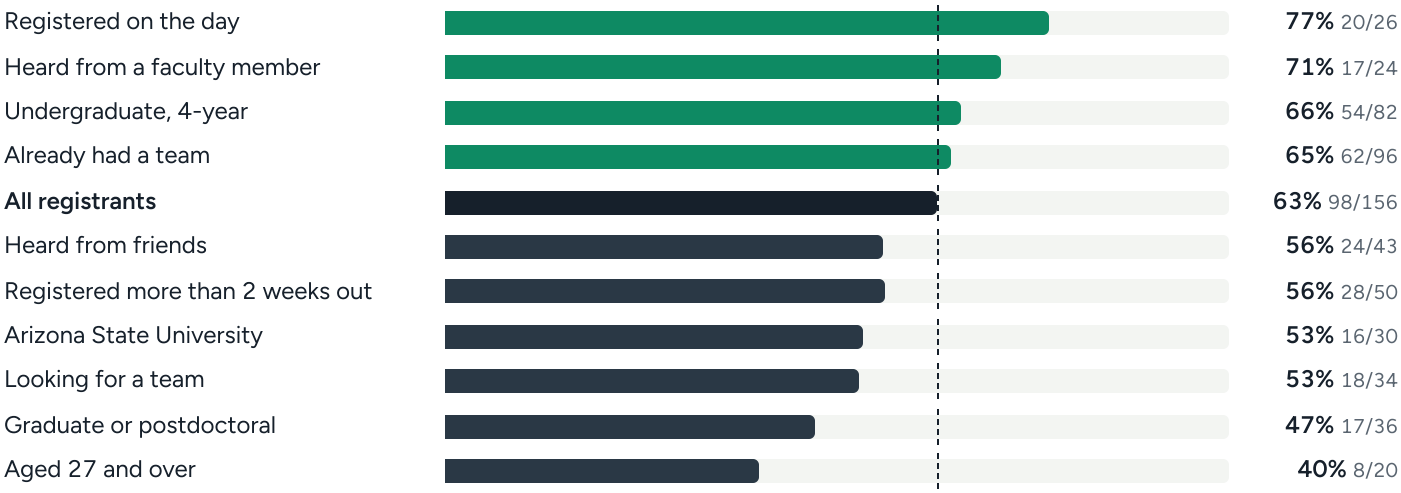
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WHAT DROVE TURNOUT AND RESULTS

Who came, and what the winning teams had in common

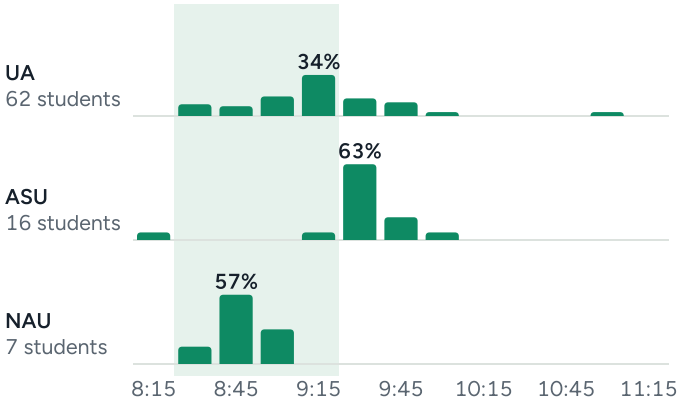
Share of registrants who came, by what they told us

Dashed line: 63% for all 156 registrants. Darker bars are below it.



Arrival depended on distance

Share of each school's students checking in per 15 minutes. Shaded: the scheduled slot. 14 of 16 ASU students, about two hours away, arrived after it closed.



Average judge score by team type

Out of 20, all 30 teams. Filled dot: the first group named. Groups are small, so read these as patterns, not proof.

Formed on the event day (13 teams) against formed in advance (17)

14.74 — 15.65

Four members (11 teams) against two or three members (19)

14.90 — 15.54

Mixed fields of study (18 teams) against computing majors only (12)

14.90 — 15.29

What the three award-winning teams had in common

3 of 3
formed on the morning of the event, between 7:28 and 9:29 AM

7 of 10
members on site came from NAU, every NAU student who attended

6 of 10
heard about AgX from a faculty member or instructor

2 of 9
who named a field study computer science; the rest finance, engineering and media

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THE CHALLENGES

Two real problems, revealed at 10:45 AM

Both challenges came from Arizona agriculture and stayed secret until the opening ceremony. Teams split almost evenly between them.

CHALLENGE 1

Spray or Wait?

Using weather intelligence to prevent pesticide drift in orchards

Build a decision-support tool that reads temperature and wind at two or more heights, catches the temperature inversions a single ground station misses, and tells the applicator Go, Caution or Stop, with the reason and a time-stamped log.

16 teams judged	**52** builders	**114** people read the brief online
48 builders shared a resume	**5** questions and answers posted	**8** judges scored it

Winner, 17.50 of 20

1st Above The Canopy

Project: SMART

CHALLENGE 2 · PRESENTED BY AMERICAN TRACTOR COMPANY

Run the Fleet

Coordinate a team of autonomous tractors, and adapt when things go wrong

Build a coordinator that assigns field jobs to a small fleet of simulated autonomous tractors, respects each machine's implements, fuel and deadlines, recovers when one breaks down, and explains the new plan in plain language.

14 teams judged	**43** builders	**97** people read the brief online
43 builders shared a resume	**4** questions and answers posted	**4** judges, one from ATC

1st, 18.65 of 20

1st Team5

Farm ManAIgement

2nd, 17.55 of 20

2nd CHOPPA

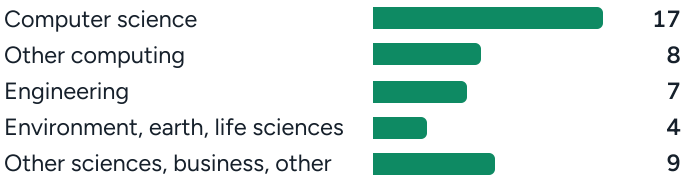
FleetForeman

What a challenge sponsor gets

American Tractor Company put a real coordination problem in front of 43 builders for six hours. All 43 shared a resume and 26 a LinkedIn profile, the company's judge scored every team, and the brief and results stay on the event page, credited to the sponsor.

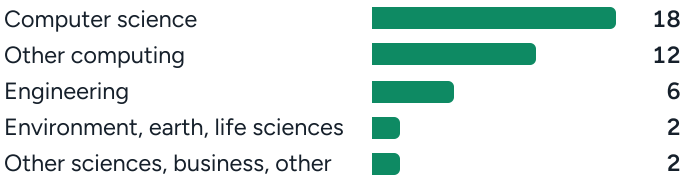
Spray or Wait? builders, by field of study

45 of the 49 on site who named a field; 6 of the 49 were women



Run the Fleet builders, by field of study

40 builders on site; 12 were women



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TEAMS

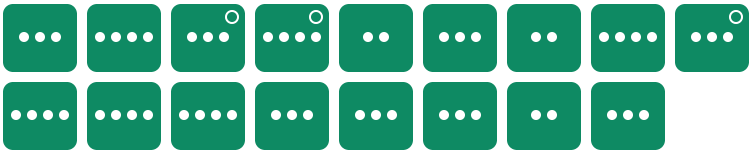
30 teams started and all 30 submitted a project

Students formed teams of 2 to 4 in Connecto, and 17 of the 30 existed before the doors opened. No team dropped out between forming and judging. Every one submitted a project and was scored by four judges.

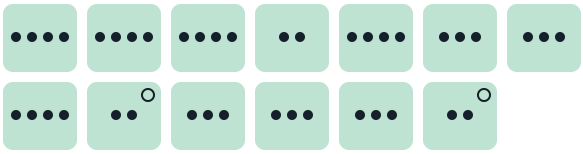
Every team, in the order it formed

Each tile is a team and each dot a member. All 30 submitted a project. Ring: the project was entered by staff after the 5:00 PM deadline.

17 formed in Connecto before the day, from November 12



13 formed on the day



30 of 30
teams submitted a project, 25 by the deadline and 5 within 90 minutes after it

0
teams dropped out between forming and judging

42
students were already on a team before the day began

6, 13, 11
teams of two, three and four members

When teams formed

The 30 teams, by the day each was created in Connecto



How students got onto a team

113 joins across the event, including students who changed team



Builders who arrived without a team

25 on site had said at registration that they had no team. 24 of them built on one.



How teams form in Connecto

Each student sees the teams with open spots and the people still without a team, listed in order of fit with their own skills, background and what they are looking for. A captain invites from that list or shares a link, join code or QR, and organizers place anyone left.

One team shows it. A graduate student without a team opened one two days before the event and invited a graduate student from another university who was also looking. They finished in the top quarter of their challenge.

Not counted in the 30: six one-person teams that were opened and closed during formation, five of whose founders joined another team, and one team that registered again under a new record.

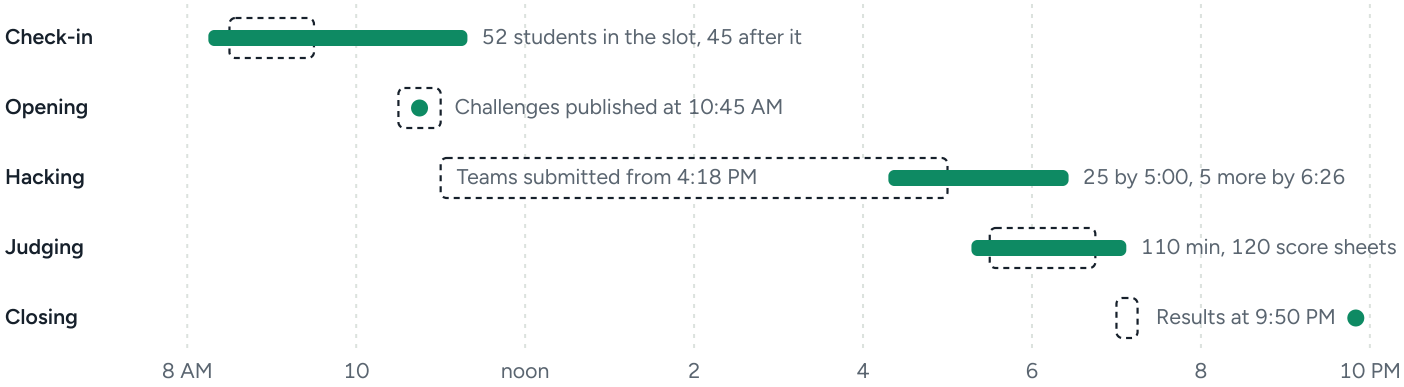
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ON THE DAY

How the day ran

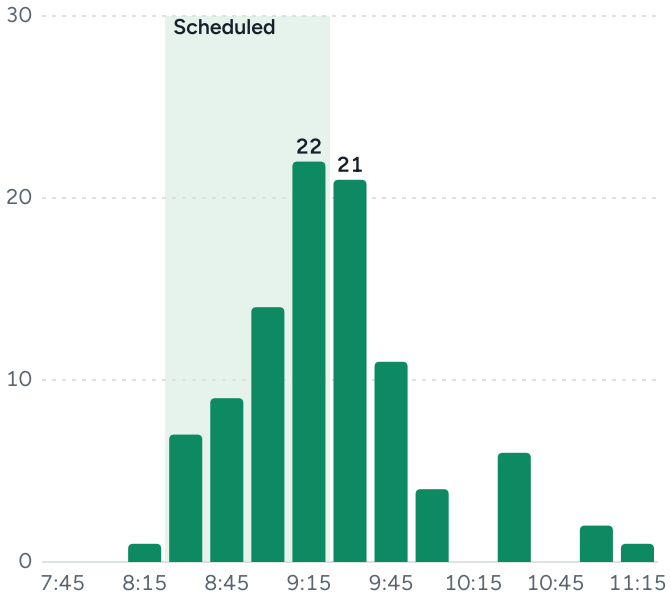
The schedule, planned and actual

Outlined: the published schedule. Green: what happened, from check-in, submission and scoring times.



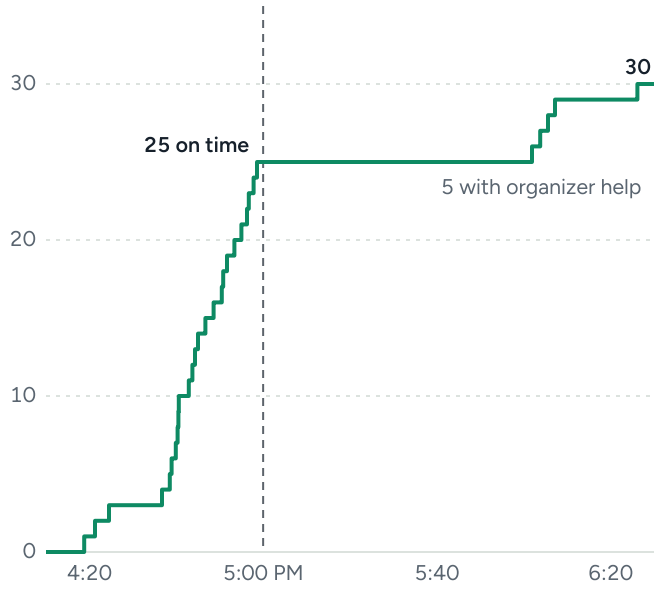
Students checked in, per 15 minutes

Shaded: the scheduled check-in slot



Teams submitted, running total

Dashed line: the 5:00 PM deadline



103
people checked in: 98 students and 5 organizers and judges

43
checked in during the busiest half hour, 9:15 to 9:45 AM

25 of 30
teams submitted before the 5:00 PM deadline

6:26 PM
the last of the 5 late projects was entered by staff

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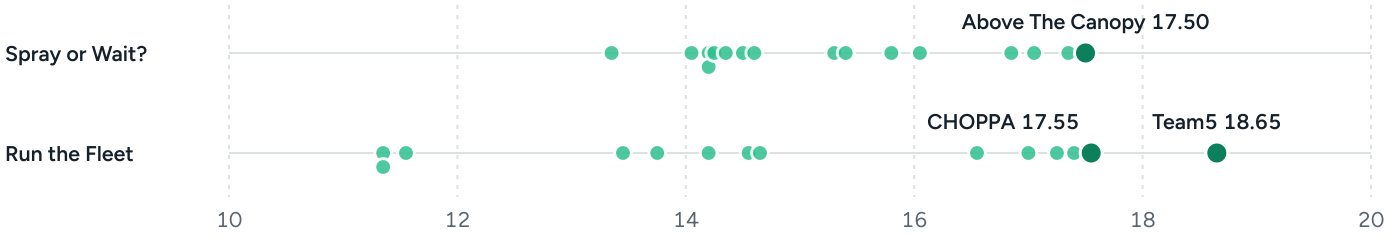
JUDGING AND RESULTS

Every team scored four times, on the judges' phones

Eight judges from the University of Arizona and industry, including American Tractor Company, walked the room in two panels and marked each team on its challenge's five-part rubric. A recount of all 120 score sheets after the event matched every published placing.

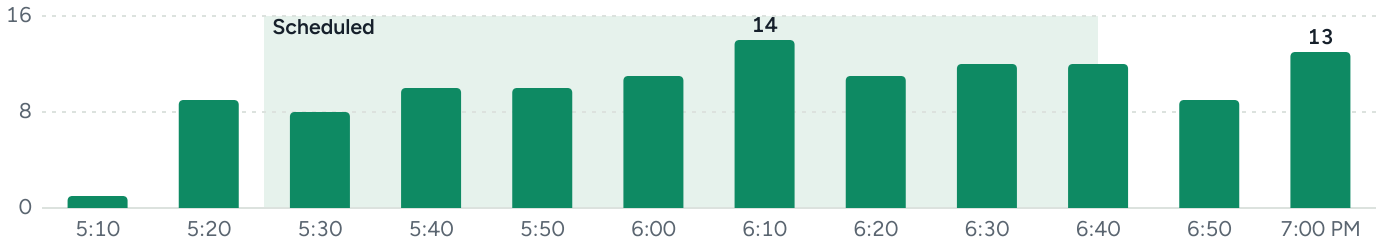
Every team's average score, out of 20

Each dot is one team. Award winners are named; other teams are not.



Score sheets saved, per 10 minutes

Shaded: the scheduled judging slot, 5:30 to 6:45 PM. Judges kept a steady pace of about 11 sheets every 10 minutes; the slot was too short for 30 teams.



How judging worked

1. Judges invited

Each judge got an email link to their own judging view, with their teams in walking order. All 8 opened it before judging began.

2. Scored at the table

A visit timer, each rubric criterion marked 1 to 5 and weighted to its points, and an optional note. Judges left 23 notes.

3. Results in one step

Organizers followed a live board of who had scored whom, then published the winners to every participant at once.

120
score sheets, none missing, none late

4
independent scores for every team

5.6 min
median time a judge spent at a team's table

110 min
from first score to last, against a 75-minute slot

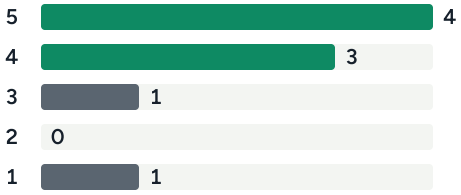
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IN THEIR WORDS

Participants rated the day 4.0 out of 5

"How likely are you to recommend this event to a friend?"

9 responses, 1 to 5



7 of 9

want to join the 24-hour hackathon in March (5 yes, 2 maybe, none said no)

> "We met real farmers built a real working project and made real connections."
>
> Rated 5

> "I've never been at a non 24 hour but it was very streamlined I was impressed and very grateful for the abundance of food and water"
>
> Rated 5

> "It was smooth, a little bit more food was good. The judging took too long which drained our energy more and more."
>
> Rated 5

> "People didn't really know what was happening, I got a lot of conflicting information"
>
> Rated 4

NEXT STEPS

Recommendations for the 24-hour hackathon in March

1. **Recruit through faculty.** Faculty-referred students came at 71% and filled 6 of 10 award-team places. Ask instructors at UA and ASU to bring teams, as NAU's did.
2. **Bring agriculture students into the room.** No builder studies agriculture and 6 study a related science. Recruit through agriculture, plant science and environmental science departments, and seat those students on mixed teams.
3. **Close the graduate-student gap.** Graduate students came at 47%. A reminder two days out, and timing that fits research schedules, would help; early registrants came at 56% overall.
4. **Support women through to the finish.** Women were 26% of the room but on none of the award teams. Partner with women-in-computing groups on team formation and mentoring before the day.
5. **Plan for travel.** 14 of 16 ASU students arrived after check-in closed. Keep check-in open later or coordinate travel from Phoenix.
6. **Fit judging to its slot.** With every judge seeing every team, 16 teams at about 6 minutes each takes over 90 minutes. Judges walking in pairs, two visits per team, brings it under an hour.
7. **Match solo registrants before the day.** 34 students were looking for a team and came at 53%; organizers placed 30 people by hand on the morning.
8. **Ask the questions you want to report on.** Add hackathon experience and first-generation status, fix the ethnicity option, and save answers to each person's Hack Arizona record so March can be compared with AgX. Collect feedback during the closing, when the whole room is there: only 9 of 98 answered afterwards.

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POWERED BY CONNECTO

One platform, from first click to final results

Hack Arizona ran AgX on Connecto. One database holds registration, check-in, teams and judging, so this report could follow each student from sign-up to final score.

Event page and registration

Custom forms, walk-ins at the door, and every sign-up tagged with its source.

156 registered from 582 visitors

People records

Every registration joins the organizer's people database, so returning students are recognized.

29 returning students recognized

Messages

Five announcements by email, push and a lock-screen card, plus automatic confirmations and team emails.

98.9% of 633 announcement emails delivered

Check-in

A staff station with name search, QR badges in the app, and self check-in.

103 checked in, 43 in the peak half hour

Teams

Students see open teams and people without a team in order of fit. Organizers place anyone still looking.

17 of 30 teams formed before the day

Challenges and Q&A

Briefs published on a timer at 10:45 AM, with questions and answers on each challenge's page.

156 people opened the challenges

Project submission

Submission on each team's page, with a deadline countdown and reminders.

30 of 30 teams submitted, none dropped out

Judging on phones

Judges scored at the table while organizers watched progress live and published results in one step.

120 score sheets from 8 judges

Mobile app

Schedule, challenges, teams and a live event card on the lock screen through the day.

62 of 98 students had the app

Reporting

Registration answers joined to attendance, teams and scores: the analysis behind pages 5 to 7.

156 students followed from sign-up to score

Run your next event on Connecto

Request a workspace and run registration, check-in, teams and judging in one place.

Request a workspace
getconnecto.app/host

Or talk to us about your event
getconnecto.app/contact

Scan to request a workspace

About this report

Prepared by Connecto on November 16, 2026 from the event's data in Connecto and its web and app analytics. All figures are totals; no participant's personal data appears, and demographic results are reported only for groups, never for individuals. Team and project names are as published on the event page. Questions: support@getconnecto.app