How-to: Engineering Inspiration

How-to: Pit Rep

Guidelines

Ensure everything you talk about and show the judges aligns with the guidelines of the award (subject to change - visit the [FIRST Award documentation](#) for the latest information)

- Extent and inventiveness of the team's efforts to recruit students to engineering with particular emphasis on the most recent year's efforts. Measurable success of those efforts.

- Extent and effectiveness of the team's community outreach efforts with particular emphasis on the most recent year's efforts. Measurable success of those efforts.

- A commitment to science and technology education among the team, school, and community.

- Achievement of the *FIRST* mission and ability to communicate that at the competition and away from it.

- Efforts are ongoing, not strictly concentrated on the build and competition season.

What to expect from judges:

You will likely get two sets of judges on Friday (TA/Team Attributes and MCI/Machine Creativity and Innovation)
- These judges want to hear everything you have to say. Their goal is to match you with the awards you qualify for.
    - While this set of judging seems like a Q&A format, it is actually more of you telling them everything you can.

Saturday morning is the short-list judges. Depending on what awards you are short-listed for, you may have multiple sets of judges asking more questions.

- These judges likely don't know very much about what you have to say (another set of judges probably told them to ask you questions about x, y, and z but nothing else.)
    - Depending on the questions they ask, you can figure out what awards you may be in the running for!

Tips from Team Neutrino:
- Use statistics over the past year!
    - Judges love to hear your stories, but stats are a great way to share your measurable impact.
    - Provide them in standardized metrics that align with official <u>FIRST Impact Award definitions</u>:
        - X teams started/mentored/assisted in past 1 year, x hours (also be able to explain what each type looks like)
        - X outreach events, x people reached (eyeballs seen), x interactions, x hours
        - X camps started/ran/hosted/supported, x hours, x participants
    - Ensure they're all consistent across your messaging. Hard to trust the "same" statistics when they are different from page to page.

- Talk about the direct impact that your efforts have had on program participants.
    - Use benchmark assessments to quantify your direct impact on participants. Conduct them before and after you teach them, especially for camps and workshops.
    - How many students have joined your team because of your efforts?

- While community isn't defined, we highly encourage you to start efforts in your local community where your team lives, studies, works and plays before expanding efforts out of your community (state/country).

- Consistently use "in the past year" across all of your metrics (list of outreach events, initiatives, statistics, etc) presented to the judges.

- If collaborating with other teams on projects, create a shared & agreed upon document that lists what each team did and their role (started/hosted/supported).

- If you've started any new initiatives that don't yet have measurable results, such as writing a bill for your state legislature that has yet to pass, don't spend copious amounts of time talking about them. You should do that next year when you do have measurable results.

- Define what success means to your team and create SMART goals around it.

- You need to be able to tell a good story.
    - Great watch to get ideas: https://youtu.be/HYQOW34b-0g

- Be able to answer the question, "If a judge were to walk into your local (grocery) store and ask a citizen what they thought about your team & impact on the community, what would they say?"

Documentation
1. Judges packet/binder
    - Purpose: More detailed information/visuals that should cover everything you want to go through with the judges for each set of awards (1 for TA and 1 for MCI). Use this to supplement your discussion with the judges, but don't include too much. Highly recommend no more than 20-30 pages. Give this documentation to the first set of judges to reference later.
    - Information: all events with dates (outreach events, sponsor visits, camps, etc.), outreach spec sheet with easily accessible stats, business plan, team mission
2. Spec sheets
    - Purpose: Quick reference for judges to use when deliberating to justify why your team is better than another team.
    - Information: Outreach—people reached, number of events, camps ran, teams mentored, teams started, etc.

- Engineering and programming spec sheets can also be used to highlight important robot information
3. Business plan
    - Purpose: Detailed information on fundraising, sponsor relations, and sustainability
    - Information: Mission statement, team overview (history, growth, engagement), marketing/recruitment, organization, SWOT analysis, financial statement

Pit Interview

Judges have limited time with teams, usually only 10-15 minutes. You need to be able to succulently tell the judges about all your efforts during the first 5-8 minutes so they can ask questions. Ideally, focus your emphasis on the top initiative(s) you've completed in the past year, but make sure you touch on all your other efforts at a high level so you can lead the judge's follow-up questions. We highly recommend preparing and practicing a "presentation" so you can make the best use of time while ensuring that you cover everything you want the judges to know. Being able to tell a great story of your positive efforts within your community is the best way to get you shortlisted.