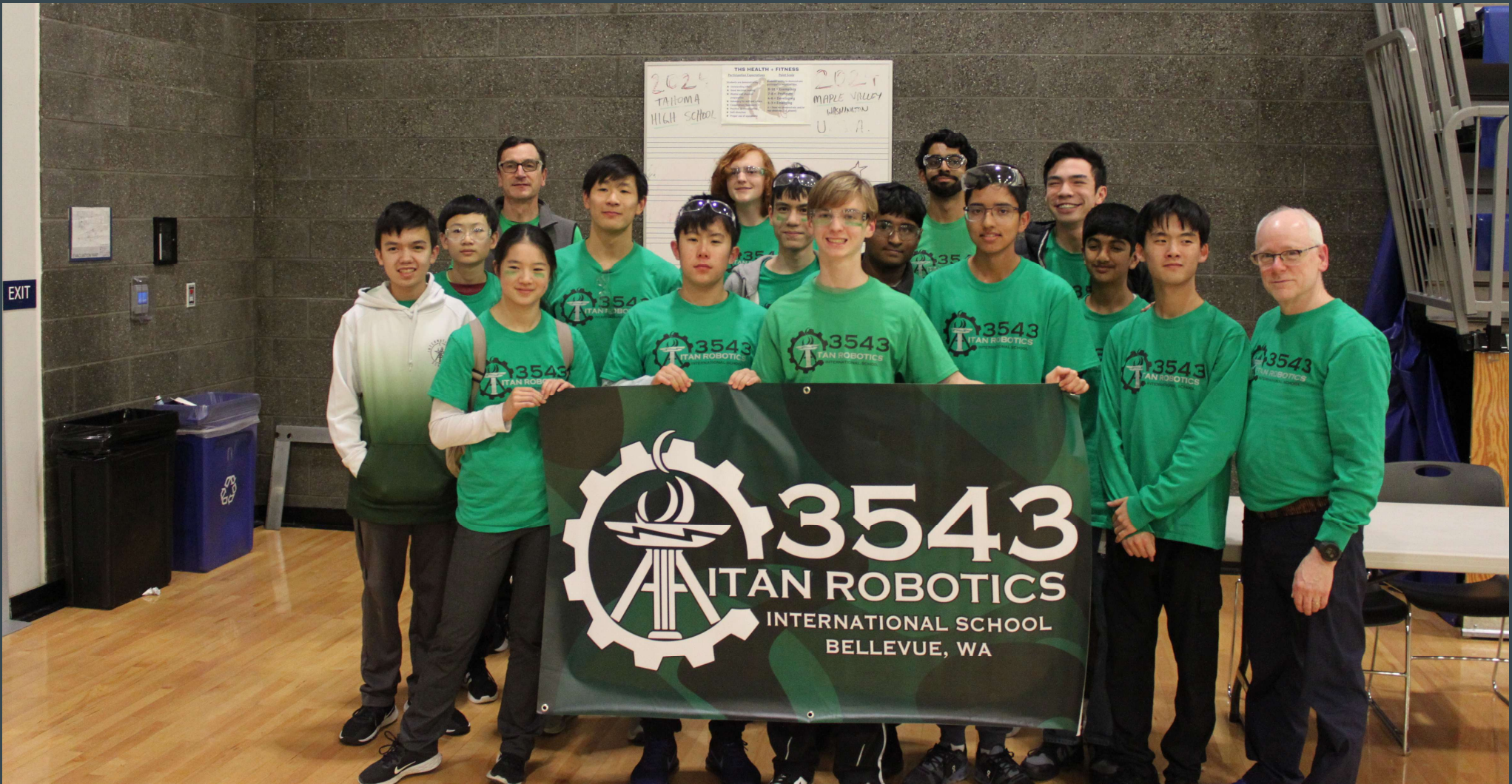


First Tech Challenge

FTC Wrap Up Meeting
2024-25 season

15 Jan 2025





Student Expectations

- Teamwork
- Focus on Robotics
- Share ideas and be creative
- Attend important events (kick-off, competitions)
- Contribute to the team's Engineering Notebook
- It's small team--you can't pick and choose the things that you want to participate in
- **BE SAFE, HAVE FUN, AND ACTIVELY PARTICIPATE!**



What were your thoughts & Ideas from the season?

- Drive team performed well
- Should have had multiple starting locations for autonomous
- Need a designated person to talk to the alliance drive team
- Reliable telescoping extender
- Judging room ... weren't quick on answering judges questions ... and it fell to the few
- Slow telescoping extender
- Experiment with separate pickup mechanism
- Smaller form factor
- Decent accessibility for maintenance
- Differential wrist greatly improved pickup
- Sometimes inconsistent ejection of game element
- Drive team must be very knowledgeable on the Auto setup
- Add anti-static to our checklist

Outreach during the season

Fundraising during the season

What Worked?

- Committed to a telescoping extender early
- Splitting into subgroups early
- Drawing inspiration from other designs & teams
- Very reliable
- Prioritizing wire management
- Modular design
- Willingness to change concepts and designs
- Having previous years robots to use during software development (alternate platform)
- Highly reconfigurable Autonomous code
- Use of vision and multiple cameras/sensors

What Didn't Work So Well?

Never really completed the different end effectors before committing to a design

We didn't hold any scrimmages this year ... kind of a missed opportunity (both in practice and in community outreach)

The drive team were largely hands off when it came to repairing and maintaining the robot ... they usually are the front line

Engineering Portfolio was started early; but getting the good content was put off until the very end

Getting / Keeping the whole team engaged

Fund Raising

We need to prepare for the coming season, and refill the reserve account that we talked about in the judging presentation

What are the Lessons Learned about the season?

Meeting schedule and Frequency?

Consider 4 meetings a week in the future

Summer Preparation?

How do we gain/recruit more programming experience?

Computer Aided Design (CAD) experience?

Prototyping phase?



Thank you!
