

Hook Line and Sinker
The Greatest CD Social Experiment to Date

Foreword:

For years now, Chief Delphi users have been unknowingly acting as pawns in the greater game of global chess. Now that their data is no longer needed, it is time to share. I would like to thank the academy for making this possible.

Data:

RFID Paper

UWB tech :

<https://www.digikey.com/product-detail/en/decawave-limited/DWM1004C/1479-DWM1004CCT-ND/11200003>

x

Someone put some headers in.

Sections for this white paper to address:

Reasons why the current 2020 game was a failure in regards to scoring data

Reasons why RFID would solve the aforementioned issue

Additional examples of previous games in which RFID would have improved QOL

Example COTS RFID system that could be dropped in

Additional parts list to build a custom RFID system better suited for FRC Purposes

Manufacturers who would be willing and able to modify game pieces to include tags

Set of requirements or maintenance procedures to be followed during a competition

An additional set of requirements teams must fulfill in order for the system to be deployed

Additional protocols to follow should the RFID system fail at the competition

How critical should it be considered to be? If some part of the system fails, do we stop matches until it's fixed?

Who in the volunteer corps is responsible for RFID system

Field-side

Robot-side (if different from field-side)

Possible Offseason events willing to test system

The system from which to retrieve data

Optional on whether to present data in raw form or add some amount of interpretation

Alternative systems to RFID

Scouting Alliances?

Sorry to get political, but RFID is pronounced riff-id, right? Just making sure

RFID good 

^

^^

Okay now this is epic

// tmichals please type below this line //

Table of Contents:

Table of Contents:	2
Abstract	3
Problem Statement	3
Background	3
Proposed Solution	3
Conclusion	4
References	4

Abstract

This paper outlines the need for the application of RFID (Radio Frequency Identification) to track the scoring for each FRC robot that is competing in an FRC match. The current FRC scoring system cannot gather individual robot information but is only able to collect data at an alliance level of detail. The proposed solution would use RFID technology to automate collection of scoring data per robot.

Teams that can field an experienced group of students to gather this scoring data gain an advantage over teams that cannot match their resources and experience.

Having individual real-time robot data available to all teams will allow them to pick better for the play-off matches, making the game both more competitive and more fair.

Problem Statement

At the current time, the FMS collects scoring data as the collective sum of an Alliance's efforts. However, this data is not separable into the components that each individual robot contributed, thus making it incredibly difficult to evaluate how a specific robot did in any given match. With the addition of RFID tagging individual game elements, it would be possible to distill any contribution to the overall score any given team made during a match.

Background

This section provides the background information required for the audience to grasp the problem and, ultimately, the solution. The content may be detailed and technical or broad and high-level. The content depends on the reader and the problem.

If original research is completed for the white paper, the methods should be communicated.

The background is white. It's a white paper

Proposed Solution

<https://www.mturk.com/>

The 'ta-da' moment of the white paper.

Based on the preceding information, the solution is now presented. It is developed and argued for using the gathered evidence and the expertise of the author and their company.

Take some RFID chips and add 'em to that spicy FRC salsa and ooh mama. Scouting is pretty good now.

Conclusion

This section summarizes the white paper's major findings. Recommendations based on the solution are provided. **Uwu**

Third world labor is cheaper than rfid chips. Are you proposing that we have third world citizens count balls instead of RFID chips. Yeah. what is wrong with you. Why would i make an rfid when i could pay someone a fraction of a cent to do my job for me. Payment isn't necessary if you have a gun. Is that what they mean when that maher guy talks about weaponizing GP. im pretty sure yeah. Wow, not surprised tbh. Frc students are very good at cutting costs. Just treat it like a bom. I mean if we really want to cut costs we could say that the people are actually FRC students but they are actually from a different country. Bonus points is including this into our chairman's submissions so we can talk about spreading stem in 3rd world countries.

International outreach is very lacking for many FIRST teams, a simple import export system will be an easy ticket to HoF for many teams. Along with making tetrax ventilators. Yeah I think tetrax ventilators are really important. I don't see what the issue is with them. Though im not sure why we aren't just using the frc compressor that everyone gets in the kop. Then the hospitals don't need to account for it on the BOM, even better. Yeah + we can get even more outreach points if we say we saved ppls lives and made them join an frc team to continue their breathing. Our frc team spreads the breath of life around the world, sounds about as good as that one team's chairman video that was really packed with content and no special effects. Yeah I'm super glad that we have such teams that really have such strong competitive integrity working towards spreading stem <3. When i joined the FIRST community in 2001, this is exactly what I envisioned: FIRST teams using the low quality hardware shilled to them by multinational corporations in order to save lives. Soon in the future, I hope that hospitals will start to use RoboRios and PDPs, deciding which patients wont get ventilators after more than 16 patients come in. Instead of the flawed system of triage or whatever that stupid thing is, I vote we create a daily alliance selection in order to choose who will get medical help. This could help reduce the barrier to start mentoring an FRC team. Once doctors and patients alike learn how to properly survive in an alliance selection process, FIRST will instantly become more profitable, with patients paying into the millions in order to get ventilator access. That would be a certified american moment. Looking forward to seeing what we discussed be implemented. I think a reasonable timeline would be to have all this done by the end of the week? If robot in 3 days teams can do it in 3 days, why do they even need a week without needing to strategize? one day should be more than enough. That is very true. I have passed the message along to frank, hopefully all of this will be implemented quickly. I have also repeatedly pinged high level members of the Private LRI slack in the hope that they will pass it on to important FIRST employees such as Frank, Dean, and Jamee. Thank you for your service, good sir. No problem at all.

References

Put links in here with a short description of what they are.

https://en.wikipedia.org/wiki/Radio-frequency_identification - Radio-frequency identification, from Wikipedia, the free encyclopedia at en.wikipedia.org

<https://blog.thebluealliance.com/2017/10/05/the-math-behind-opr-an-introduction/> - How is OPR Calculated.

_____ draft points below _____

1. How do we use RFID to help track each robot and game piece?
2. Would manufacturers be willing and able to modify game pieces to include RFID tags?
3. How would the introduction of RFID technology to the FRC students and mentors be rolled out?
4. What happens if a team is unable to engineer the RFID fixture into their robot design? Is the addition of RFID a requirement of competing in a FRC match game?
5. How would the data collected from the RFID system be integrated into the current FRC FMS?
6. What would be the requirements or maintenance procedures for the RFID equipment during the competitions?
Put the antenna on the hood and track it using sensors
7. What would the protocols be if the RFID system failed at competition? How critical should it be considered to be? If some part of the system fails, do we stop matches until it's fixed?
Instant dq
8. Who in the volunteer corps is responsible for the RFID system?
 - a) Field-side
 - b) Robot-side (if different from field-side)
9. What is the reusability of RFID from year to year?

NGL Bro, u sound like you've got the classic case of mad because bad!

Wow this kinda died

Fell off harder than juice and X combined 😢😢😢

I just stopped by to see "progress" and it is shorter than before. This project seems to not have any legs. But I would like to advocate that FIRST don't skimp on -ngreen

As a student with a masters thesis in RFID implementation, I feel that this is a complete train wreck and disrespectful to Harry Stockman. If this so-called RFID Expert would like to participate in what the kids call a 1v1 on RFID knowledge, I would be ready any day. I will not tolerate this public defecation in the name of RFID.

Pull up on dust bet

¬_¬(ツ)_/¬

This is by far the funniest thread i have ever seen on CD. You could make a movie out of this.