

HOLIDAY GIFT GUIDE



# ROBOT

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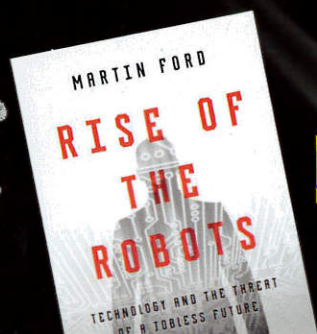
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RISE OF THE ROBOTS  
AN INTERVIEW WITH MARTIN FORD

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# FIRST ROBOTICS STATE OF MICHIGAN CHAMPIONSHIP 2015

## "RECYCLE RUSH"



102 Michigan schools participated in the FIRST Robotics Michigan Championship held in Grand Rapids at the Deltaplex Arena, April 8-11, 2015. This was another fantastic day of fun, technology and support from the State of Michigan and the founder of FIRST, Dean Kamen.

### GAME SUMMARY

"Recycle Rush" is a representation of real life robots moving items, possibly around a factory floor. The teams must score points by stacking totes on scoring platforms, capping those stacks with recycling containers, and disposing of pool noodles which represent



Teams work hard behind protective plastic barrier.



Preparing for the start of competition.

trash. At the beginning of the match there is a 15 second time period in which the robots must perform autonomously with the rest of the match being guided by student operators. Three teams form an Alliance and must work cooperatively to accomplish the Recycle game's end result which is to have stacked totes and recycle bins placed in scoring areas. The more totes a team can stack, the higher the point value.

### WHAT IS AN ALLIANCE?

This is a concept unique to FRC and attributed to its founder, Dean Kamen. The intention is to have competing teams join together to work toward one common goal. As the last phase of the competition, the highest placing teams are allowed to



select two other teams which then becomes an alliance. This concept is a representation of what these young competitors will face in life as they will need to cooperatively work with others to achieve a goal that could not be accomplished alone.

### DEAN KAMEN'S MISSION FOR FIRST ROBOTICS:

"Our mission is to show students of every age that science, technology, and problem-solving are not only fun and rewarding, but are proven paths to successful careers and a bright future for us all. Additionally we want to transform our

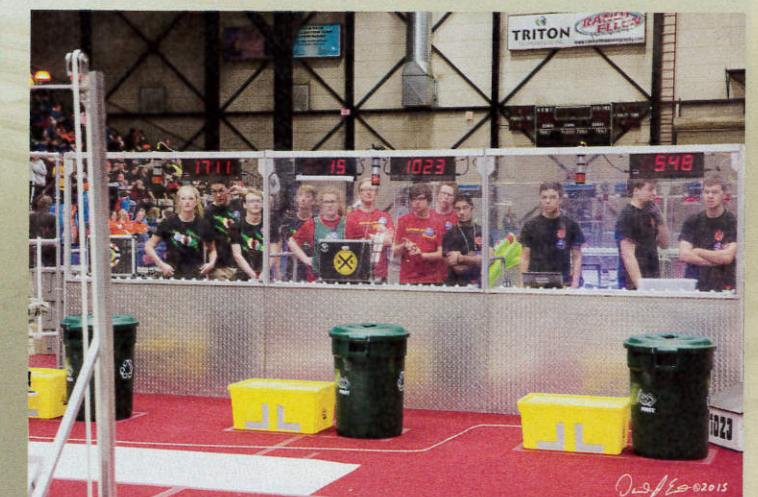
culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology heroes."

### LET THE COMPETITION BEGIN

The final day's competition went smoothly, especially due to the incorporation of two gaming fields, which moved the activities of the day on quickly. Each team



Left:  
Moving into  
scoring  
position.



Winning Alliance 1023, Bedford Express (Bedford), 548 Robostangs (Northville), 1711 Raptors (Waterford) (Photo Provided).

Who is FIRST in Michigan (As described on the FIRST in Michigan Website) [www.firstinmichigan.org/who\\_we\\_are.html](http://www.firstinmichigan.org/who_we_are.html)

### FIRST IN MICHIGAN IS:

- A 501(C)(3) Non-Profit Corporation.
- A volunteer based organization spread over 16 districts throughout Michigan.
- Led by a board of directors of 20-30 members representing broadly all 16 districts and other key FIRST partners in Michigan.

### MISSION

- To establish a sustainable FIRST Robotics Competition team at every high school in Michigan.
- To foster early interest in the FIRST Robotics Competition through FIRST LEGO League in the early elementary schools [www.firstinmichigan.org/jrfl/index.html](http://www.firstinmichigan.org/jrfl/index.html), FIRST LEGO League in late elementary to early middle schools [www.firstinmichigan.org/fl/index.html](http://www.firstinmichigan.org/fl/index.html) and FIRST Tech Challenge in late middle schools [www.firstinmichigan.org/ftc/index.html](http://www.firstinmichigan.org/ftc/index.html)

### STRATEGY

- Strive to make FIRST's vision, Michigan's vision.
- Increase FIRST visibility in the state, especially through its board of directors.
- Increase effectiveness by being closer to teams, sponsors, mentors, educators, foundations, government, business, and media.
- Better manage FIRST's financial needs and resources in the state.
- Be a model FIRST chartered affiliate.
- Build on the continuous growth, started in 1993, of FIRST Robotics teams in Michigan high schools.
- Establish FIRST in Michigan as the "alma mater" for all alumni of FIRST programs in the state.





ABOVE LEFT: Governor Rick Snyder addressing the audience. CENTER: Tom Nader, event announcer, always has fun. RIGHT: Don Bossi, President of FIRST watching over Michigan's competition.



Positioning Totes and Recycle bins on scoring line.



Two packages on scoring platform with a third ready.

would gather their recycle bins then would quickly start gathering totes, pushing each tote upward as it slid another tote in place ready to be delivered to a scoring position. In addition to the totes and recycle bin, each team had to deal with litter in the form of pool noodles, which is not an easy task. However, during the day's competition there were many towers of tote bins and recycle bins falling over due to miss-alignment or bumping.

I had a chance to speak with one of the to be winning teams, 548 Robostangs (Northville), and asked team member William Ding (his team nickname is Billding) what was different between last year's competition and this year, "The strategy is different this year, as last year the competition was very defensive and we had a lot more capability to stop other robots from scoring where this year we are concentrating more on the offensive part of scoring. This year also had much more logistics to do to distance, we had to travel to get to this new venue, with hotels, getting our equipment safely transported, etc."

I asked Team 1322, The Great



Governor Snyder being interviewed by Detroit Public TV.



ABOVE LEFT: Dean Kamen, founder of FIRST speaking to the audience. RIGHT: Marjie Jenkins, event coordinator, monitors the activities of the event to ensure a smooth operation.



Alliances are being formed in preparation for the finals.

Leviathans, team member Andrew Killian what was the biggest challenge in getting all of your team and equipment here, "Definitely we were short staffed due to spring break and it took a lot of effort from the 12 active members left to pull this off."

#### INTERVIEW WITH EVENT COORDINATOR, MARJIE JENKINS

Marjie, what was the biggest challenge from last year at Eastern Michigan University in Ypsilanti to this new venue in Grand Rapids, "Basically it is a new venue and we have never done an event like this before. It is the biggest event outside of the world championships. We have 102 teams with two fields running the same schedule, which we have never done. The two fields played nicely and went the way they should."

I also asked if they were planning for next year and Marjie indicated that "They have not yet and they have just been informed that Michigan will be hosting the World Championships in 2017 and we are not sure how

we are going to hold our State Championship in addition to the World Championship."

I then asked Marjie how much support FIRST in Michigan gets from the State legislators and the Governor, "We get a lot of support. The Governor and the legislature signed, and we got at the beginning of the year, 2 million dollars to help First of Michigan to support teams and to support the organization as a whole. They are completely behind us in supporting our programs. We have had a representative at all of our events."

Marjie has battled cancer and as of this competition has won! Our thoughts are with her for continued success.

#### INTERVIEW WITH GOVERNOR, RICK SYNDER OF MICHIGAN

On behalf of Robot Magazine I was amongst a privileged few who were granted permission to interview the Governor as his day was hectic, to say the least.

Robot Magazine: Governor, what is the greatest impact you believe robotics compe-



Team mascots kept the crowd entertained.

#### STATE CHAMPIONS

Red Alliance -  
Team 1023 - Bedford Express -  
Temperance, MI  
Team 548 - Robostangs - Northville, MI  
Team 1711 - Raptors - Traverse City, MI

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tion and these students will have on the State of Michigan?

Governor Snyder: "The greatest impact will be in 20 to 30 years. That's the most exciting part. However, they are making a huge positive impact today as a result of these competitions. If you look at how they are performing in school, you will see that the competitions will increase their performance and this will give more opportunities to these students, which is helping our economy today. But in 20 to 30 years you are going to see a lot of future leaders that are from these competitions that are designing world class products which will change the world for all of us." ©