

## Justin Montois – This Is How I Work



This week we are featuring one of the creators of [Mike and Justin in the Morning and FRC Top 25](#), Justin Montois. Justin has helped develop one of the most popular webcast shows in the FRC community. Each week during the competition season they compile votes and do a Top 25 show. These shows also recap many of the hot topics of the week in FRC. If you're not tuning in, you should be. The viewer chats during the webcasts are entertaining and sometimes even informative. This year they also started FRC Premier Night where they unveiled many of this seasons release videos. We interviewed Justin about his time in FRC, his role on GRR, and much more.

[Responses from July 30, 2013]

**Name:** Justin Montois  
**CD Username:** [JustinMontois](#) (Formerly 340x4xlife)  
**Current Gig/Job:** Student / Robotics Summer Camp Instructor  
**Alma Mater/Degree:** SUNY Oswego  
**Current Team(s):** [340 GRR](#) (Greater Rochester Robotics)  
**Former Team(s):** None  
**Location:** Rochester, NY  
**Hobbies:** Robotics, Bass Fishing, Disc Golf, Ball Golf, watching sports, mainly Hockey (Sabres) and Football (49ers and Stanford)



I want to thank Team 3847 for the opportunity for me to participate in this great initiative. The opportunity to learn about other people in the FRC community is great.

My involvement in Team 340 started in 2005. During the first few years, I didn't do much beyond some CAD work. I didn't say much and learned from others. Since then, my main role on the team has been strategy and mechanical design. I was part of the design team of our kicker in 2010, Minibot in 2011, Dumping Arm and Pickup in 2012, and Climbing Mechanism in 2013.

I've also served as the Drive Team coach in 2009, 2010, 2012 and 2013. Coaching for me has been an incredibly stressful, but an equally awesome opportunity. I love strategizing for each match with my drive team and that of my alliance partners. I feel like I'm getting better as a coach mostly due to conversations I've had with some of the best drive coaches and strategists in FRC. I look up to those guys so much and you and I know who they are (Karthik Kanagasabapathy, Jim Zondag, Adam Freeman, Tyler Holtzman, and others).

If you want to be successful, learn from these guys and others around you that can help you get to where you want to be. They are more than happy to talk to you. Like me, they love this stuff and they love talking about it. That's what makes FRC special. Even Jim and John Harbaugh, brothers and NFL coaches, are sometimes reluctant to share information with one another. In FRC, most people are more than happy to talk and help out. Remember the onus is on you to step up, not for them to reach out.

### **What inspired you to do what you do? Tell us a story.**

If I met my 8 year old self, I would easily be able to tell I would end up where I am now. I've always had an interest in robotics. I loved playing with LEGO's and taking stuff apart. I've also always had a love for educating others. The connection that is made when a person is able to teach another person a skill, or give them a cool fact, is special to me. Making someone else go: "Ohhhhhhh I get it now" is an amazing thing.

When I joined Team 340 in 2005, I was able to combine my two passions. I was able to teach high school kids cool things and build robots at the same time. That combination is what makes FIRST so special. One thing that isn't always talked about and that I'm sure isn't unique to me is the relationships you develop with students. I have become friends with many of the students on the team that goes beyond the regular mentor-student relationship. Those friendships mean a lot to me and I think it means a lot to them as well. It's definitely a two way street. I often get just as much as they do out of our friendship.

### **What is your day job, and how'd you get there?**

My "day job" is being a student during the school year and a Summer Camp instructor at the Rochester Museum and Science Center during the summer. This fall will be my last semester at SUNY Oswego where I am finishing up my degree in Technology Education. Being an educator was always something I imagined myself doing. I originally wanted to teach American History, because it's viewed by many students as a boring subject and I thought I could change that. But, due to some fantastic teachers I decided the technology classroom is where I wanted to be.

### **What is your favorite story to tell about robotics?**

One of my favorite stories to tell is about our run in eliminations at the Finger Lakes Regional in 2009. It was my first year as drive coach and our robot was terrible. The [purpose of the game](#), if you don't know, was to score "balls" into a trailer attached to the robots of the opposing alliance and at the same time they were trying to score in your trailer. Well at [FLR in 2009](#), our robot scored a grand total of 1 ball that I remember. And it was a lucky bounce off the driver station.

But for me, what makes the story so compelling was the adaptation of our robot to execute a strategy. We were selected by Teams 1511 and 316 to join the #7 alliance. We had to face the #2 seed of 1503, 191, and 173 in the QF. 1511 and 316 were decent scorers, but we weren't. The only chance we had was the endgame where up to 4 SuperCells could be scored by robots or human players for 15 points each.

Our robot became the Empty Cell transporter which was a task you needed to accomplish in order to score SuperCells. We beat the #2 and #3 alliances on the way to the finals by getting our human player the opportunity to hit the opposing teams trailers with some SuperCells and he rarely missed. We lost to the #1 alliance of 1507 and company, but it was a great lesson in strategy and execution and really demonstrated how important it is to not necessarily select the best robots, but the right ones.

### **What's your favorite robot that you didn't help build?**

Awesome question. I have a few if that's ok....

- [71 in 2002](#) - Read the rules, understood the game perfectly, and flawlessly executed the strategy. Domination.
- [67 in 2005](#) - It was the first time I saw a powerhouse team truly dominate. HOT dominated the "Flop" bot style

- [1114 in 2008](#) - Elegant machine that handled a giant ball with grace.
- [148 in 2008](#) - Showcased that picking a “Simpler Strategy” can work if you’re truly the best at it
- [469 in 2011](#) - Holy fast elevator Batman.
- [1114 in 2012](#) - Simbot Jordan lived up to its moniker
- [987 in 2013](#) - Maybe the turret wasn’t necessary, but it sure was awesome
- [118 in 2013](#) - How they packed all that mechanism into a robot that was less than 30” tall was incredible.

### **What apps/software/tools can't you live without? (Work/Robotics/Home)**

All I need to design is whiteboard markers and Autodesk Inventor. I wouldn't be able to function without those two things. I also love Twitter if that counts as an 'App'. [@jmontois340](#)

### **What do you listen to while you work?**

I like to think I'm pretty diverse. Country dominates my Spotify playlists but I'll listen to anything as long as it sounds good. Classic Rock, Alternative, Rap, Oldies, Showtunes, Motown, Classical, and others all make appearances.

### **What's your schedule like during build season?**

As a team, we meet Monday, Thursday, and Saturday. However I'm usually trying to get in the shop as often as possible. When I'm not in the shop, I'm thinking about whichever part of the design process we are in. There are times I try to disconnect, but I find it incredibly difficult. Also CAD never ends.

### **What everyday thing are you better at than anyone else?**

Nothing. There's always someone better than you out there. However, I think that I'm pretty good at remembering movies lines and things like that, especially from comedies.

### **What's the best advice you've ever received?**

Find your passion. I think one of the biggest things I see with a lot of people in the workforce today is that they are working in a job that might provide well for them financially, but they aren't passionate about what they do. However, they may very well have that job in order to have their passion outside of work. Regardless of what it is or what it takes to get there, find your passion, and do it.

### **What is your favorite guilty pleasure?**

Binge watching TV series.

### **Fill in the blank. I'd love to see \_\_\_\_\_ answer these same questions.**

Karthik Kanagasabapathy from 1114 answer these questions.



*"Winning is not a sometime thing; it's an all time thing. You don't win once in a while, you don't do things right once in a while, you do them right all the time. Winning is habit. Unfortunately, so is losing."*

- Vince Lombardi