Armed with our fear-inspiring name, “The Fire Breathing Rubber Duckies” (Team 5369), my teammate and I enter the pit and unload our robot onto our assigned cafeteria table. We join other disheveled-looking teams setting up at stations strewn with a chaotic mess of nuts, bolts, junk food, wires, robots and hardware. Muscles tense with anticipation vibrate excitedly as we wait for the fast-paced, edge-of-your-seat, Giants-at-the-World-Series type games to begin.

At the playing field, our team is up. Before the buzzer shouts the start of our “Autonomous” computer-program directed segment to begin, we glance at our competitors expectantly through protective glasses which shield our eyes from possible rogue, flying hardware. Autonomous ends in fifteen seconds and our machines suddenly fly to life. I drive in earnest alongside our alliance partner and with such quickness and fluidity that the arm of our robot becomes an extension of mine. Adrenaline pumps through our veins each time our team competes and wins our uncompromising goal: Tournament Champion. Our successful qualification for the World Championships was all we could think about during our first season.

However, out of all the lessons my teammate and I learned over these past two seasons, one of the most important was that there are many types of wins besides qualifying for Worlds or winning trophies.

Some wins have been our team’s “Eureka” moments when overcoming obstacles or setbacks that we face from time to time. Last season in the middle of our Fairfield tournament, my teammate and I started to hear grinding and cracking noises emanating from what we thought was our complexly built drive train, complete with cool-looking chains, sprockets, and gears. Wild-eyed, we looked at each other. “What was that?” my partner moaned. This annoying problem persisted for, it seemed, the duration of our existence. At every competition, we had to replace mangled axles from our depleting supply, to which our mentor, my dad, gave us one of his famous quotes, “There must be a better way for you to do this.” Finally, by carefully observing another team’s robot and shifting to a simply built direct-drive base, we eliminated that problem. Eureka!

Other wins have come from our work ethic. Frequently, weekend robot sessions often turned into sleepless weekday nights of correcting programming glitches. However, despite our best efforts, our program failed at a crucial moment of the Programming Skills Challenge at last year’s World Championships. With only half an hour left to try our program one last time, we were able to reprogram our robot successfully. Our twelfth-place title for Programming Skills ironically came not from those frantic thirty minutes, but from the 15 hours we spend each week finessing our programming skills.

After each competition ends, my teammate and I exit the field and unload our robot onto our cafeteria table. Whether it’s been a loss or a win, we both know that our robot can always be improved. We count the days to the next competition, waiting for our chance.