

A Car, a Kid, and a Smile

I held the car still and guided her legs in so she could sit comfortably. Helping her mom tighten the straps, I watched her back straighten. I looked into those deep brown eyes and a huge smile crept across her face. Her body relaxed. My nod of approval told her she was good to go. She giggled, pressed the button, and off she went. This task was by far the hardest we had received during the program: modify a PowerWheels toy car to be suitable for a specific child with physical disabilities. I felt a wave of relief rush over me, but I was sad to see her go. Not only did we give her a cool new toy, we gave her mobility and sociability, two important aspects of a toddler's life that enable independence.

In the summer of 2016, I was selected to attend the most influential program of my life, the Advanced Studies Program at St. Paul's School. For almost a month and a half, I was able to dive into many aspects of engineering, something I had not been able to do at my own school.

When I found out about this project, I immediately thought of my mom, a pediatric physical therapist who works with this type of task all the time. Seeing her face light up when working with her students was always so touching, but my vision of her work changed when I experienced it first-hand. I was now the one that could change a child's life.

I was beyond excited to have a real engineering project with a legitimate time constraint and customer. This was my chance to prove to myself that I have what it takes to be an engineer. The hours were long and the troubleshooting was constant. After working for what seemed like an eternity on the electrical system, it did not work. My face turned bright red and my eyes watered, but my brain was too tired to fully comprehend what had happened. The clock was ticking and my heart broke thinking about the disappointment that would overcome our child.

There was no way I could let her down, so I hyped up the team and we worked persistently until these problems were resolved. When four-year-old Emily arrived, her shy little smirk lit up the whole room. I was lost in the trance of her deep brown eyes, curly hair, and precious giggle, but I had to snap back to reality. Every time I turned my head, I saw a new unfamiliar face, wrought with weariness from the long day. The room was packed with families, students, and even press; the pressure was on.

I stood at the workbench and wondered how in the world this was all going to get done. The best way to figure out the answer to that question was to just start working, so I pushed my stress aside and focused all of my energy into the car. Putting myself in charge, I made sure my team followed the manual even though some tasks seemed obvious. The first thing on my mind the whole time was the safety of the child; we could not mess this up.

Emily provided my team of engineers with some difficult challenges. As soon as we finished one support to keep her sitting up, another was needed, this time for her hips. We ended up having to make an entirely new seat out of plywood covered in foam for her comfort. At times, I found myself getting lost in the stress and forgetting for whom this project was all about: Emily. We were the last group to finish, a half hour past our deadline. I finally got my victory though as I saw a huge smile creep across her face as she drove her new car out of the building.