Clay Shin 10th Granada Hills Charter High School

There are many children in the world who do not have access to technology. I am a member of Voice of Calling which is a non-profit organization that helps children who don't have access to technology. We want children to learn more about computers and teach them about how computers work. We also want to educate children about coding and robotics. We decided to have a three-day camp for children during Thanksgiving week. We made the camp for children to have an opportunity to learn computer coding and robotics. We prepared and worked very hard to make this camp possible. Before the camp, everyone at Voice of Calling worked very hard preparing everything such as making shirts for the kids, buying snacks and prizes, and setting up activities for the kids to do during the camp. We set up laptops for the kids to use the program, Scratch, and we also set up Vex IQ robotics and planned fun mini games for them. Each day, the camp would be 4 hours. The first day came and all the children were enjoying the camp. We would also give them snacks such as fruit gummy snacks and juice. The children enjoyed Scratch but they really liked the robotics part of the camp. They would prefer robotics over coding because of how fun it was. On the first day, the kids played balloon battles where they control a robot and try to pop each other's balloons. After 4 hours, the first day of the camp ended successfully. The second day came and something really stood out to me. One kid was working very hard on the scratch project. He was the only kid doing Scratch while the other kids were enjoying robotics. It seemed like he was very interested and wanted to pursue computer science for his future. The second day we had a different type of robotics competition. We had an arena with rings everywhere. The goal of the game was to score the rings in the poles and try to get as many rings to your base until one minute was over. The kids practiced all day long until the final day. On the third day, we had a robotics tournament for the kids. There were prizes for the winners such as toys, robotics gear, and 3D printed toys that we made from our 3D printing machine. Everyone was having a great time and the kids enjoyed all their gifts. At the end, the kids didn't want to leave because they enjoyed this camp so much. One of the kids stayed longer just to do robotics because of how much they loved it. We hope all the kids enjoyed their Thanksgiving week because of our camp. Everyone worked very hard and our main purpose was to teach children about coding and robotics and it was successful. All the kids learned very well and they also enjoyed it. This was one of the best experiences I have ever had for an organization. I hope we can do a lot more of these camps for different kids and maybe even for the same children. We are planning to do another camp like this because we want kids to be happy and for them to have a knowledge about computer science. Voice of Calling is dedicated to helping kids around the world who don't have access to computers. We try our hardest to get donations so we can travel around the world to help kids and have camps around the world, not just in our local area. I look forward to the future and what Voice of Calling will do.

Eunice Lee 11th Cleveland Charter High School

Preparing for the three-day camp allowed me to gain insight into what it takes to teach. Being of a generation that often benefits from the achievements of those before us, it was a refreshing change of perspective to be able to set up a foundation where children would be able to begin their own explorations of different interests. The coding and robotics classes allowed for low-income and foster children to test a major portion of STEM. It was interesting to see how the students responded to the material being taught. While some became engrossed in building a robotic car, others preferred solving challenging puzzles that served as an introduction to computer coding. A few students surprised me because it seemed that the concept of learning something new was the factor that interested them the most. This just goes to show that success is a direct result of one's environment. Making sure that these types of resources are available to children will benefit our society and ultimately, make it a better place.

Hannah Moon 9th North Hollywood High School

During thanksgiving break, we had a three-day camp to teach kids how to code and how to build robots. I was assigned to help the kids build robots, drive robots, and then have a balloon popping competition game with the robots that they learned how to build. I had a fun time teaching them how to build the robots, even though sometimes the kids did not cooperate very well. Mainly, when we were building, a problem was that the kids wanted to drive the robots instead of building, so they played with the controllers and we had to take them away. Also, some of the kids had problems with building the robots, because they messed up on one part, so we had to watch everyone carefully to make sure they did not mess up or miss a step, and to make sure that they stayed on task. Building the robots was pretty easy, and it was enjoyable because I could tell some of the kids really had a fun time making the robots and that they were very interested in the robots. One of the kids especially, he built the robot very quickly with only a little bit of help from us. All of the kids that were interested in the robots were very quiet and focused on building the robot, so they ended up being able to finish the robot without a lot of trouble. In the end, we did not finish some of the robots because we did not have enough time, but we got all of the motors, brains, and wheels working, so we were able to do the balloon popping competition. However, I think that teaching them how to drive the robots was even more exciting. A lot of the kids preferred driving the robots over building them, so they were very excited as well. It was very easy to teach them how to do this, because I think some of them have used video game controllers before. The balloon popping challenge was the most pleasurable, in my opinion.

I was happy to see that the kids were entertained and excited about the challenge. One of the competitions, we did by putting paper clips in front of the robots so that they could pop balloons of other robots. On the back of the robots, we attached balloons that the other people they were going against were trying to pop. They did this by themselves with everyone so it was a little loud. Another way we did the competition is by doing it in teams. Each team had two people, and it was two robots against each other. On each side, there was two balloons, and the team to pop the balloons the fastest won the game. It was a little scary because we had to hold the balloons down, since they did not stay on the table when we taped them on. They tried their best to win and that was good because that was the point of building the robots and teaching them how to drive the robots. Afterwards, we gave prizes to the winners of the competitions and let everyone else choose something of their own. The prizes were toys and products from STEMPIA and coding competitions. The kids had a lot of fun picking out their prizes and they were smiling, so I knew they were very happy to get their prizes. Overall, it was a good experience. I had a lot of fun teaching them and seeing the kids interact with each other. Watching the kids having fun while also learning how to make robots and drive robots was exciting to me.

Hemosoo Woo 9th Palisades Charter High School

As the first few kids walked into the room, I couldn't help but notice how excited and eager they were. It was my first day as a volunteer, but it was the second day of camp, which meant most of the volunteers knew what they were doing while I was on square one. I was assigned to robotics, even though I barely knew anything about it; I was more of a coding person. I was really nervous when we were assigned each other to each child to be their helper. The thoughts clouded my head, "What if he doesn't listen to me? What if I mess something up?"

Before I knew it, we sat down together, and started building the robot that we wanted to build. I was lucky that my partner, Kenneth, had a name tag, and I did too, so I didn't have to worry about long introductions or anything. We went through a repeating sequence of me finding the parts while Kenneth energetically put them together. Whenever I notice a mistake, "Kenneth, I thi…" and the mistake was already spotted out by him. His joyfulness and optimism reminded me of my early years, when I didn't have to worry about school, my grades, and lived my life to have fun every day.

When we were building the robot, I noticed that the angles of the pieces had to be exact. It was early morning, and I had woken up a few hours before is my only excuse to the fact that we had messed up a few pieces. I quickly pointed it out, and I think Kenneth understood. We went to find the correct pieces and learned our

lesson of using the right angles. About 1 or 2 hours had passed, and we finished our robot. Even with all the issues we had while constructing the robot, we had finished first. Our achievement was rewarded with testing the robot we had created. With his eyes gleaming, Kenneth's hands finally got to touch the controller. Before I even put the robot down, Kenneth's eagerness got the better of him, and he pressed the buttons and pushed the joystick into random directions. If I was holding the robot anywhere near the tires, my hand could've been cut. That was the first time where the childish issues started. It wasn't hard to tell Kenneth when to do things, but it was hard to actually make him do them. It is an issue that I think is prevalent while working with children anywhere.

As another group finished, me and another volunteer decided to create a maze on a table using some toys. It took a bit to set up, but the kids were really excited to try it out. When we found out that they didn't understand at all, it was a bit too late. They used their robots to bulldoze through everything we had set up. Me and the other volunteer were having a laughing fit while the kids were also laughing out of their minds. Next, we tried attaching paper clips and balloons to the robots to play another game. We attached the balloons to the back and the paper clips on the front of the robots. It was like a sumo game, but a little bit more skill required for it. We let them try first, which was another mistake: the balloons did not get popped when we tried to play. The paper clips made the activity a safety hazard and would not pop the balloons from the robots. As we tried to explain the situation to the children, they didn't understand and making them cooperate so that we could take off the paper clips was difficult. Luckily, our teacher called for a break, so as the children ran to get their snacks, we resolved the situation.

As children started leaving one by one, one of the volunteers bought burgers for everyone, and we talked about the day. Overall, it was a great experience and I am excited to volunteer for more people. I made a lot of friends with the volunteers, and I had never done anything like it before.

Jaden Chung 9th West Ranch High School

When the little kid first told me to "Go to hell," I thought to myself, "That's pretty funny." I still think it's funny, but I also think that the boy, whose name is Alexander, would have been kinder if he had grown up in a healthy environment. A healthy environment would include loving parents and an education that supports your passions. He had none of these. We recruited students from a local foster care center, where the most they had was a pair of temporary parents. A lot of these kids have little to no computer science education, which is unfortunate since computer science is an ever-expanding field. That is where Voice of Calling came in. Our non-profit organization spent weeks setting up our first ever 3-Day Thanksgiving Camp, and it was a

success. We had a lot of kids come in for all three days. Since I am a coder and have absolutely no knowledge in robotics, I taught the kids the Google CS First courses. They were simple, introductory courses that anyone could easily take and understand. I remember helping this girl named Jessica who made her Scratch program all about eating cookies. After a few hours, we took a break. I handed out snacks and put on "The Grinch," which is not a bad movie. After a few more hours of coding, all the kids seemed wiped. Fortunately for them, it was time to go home. However, we would be seeing them in a few short hours. The second day, I met someone named Octavio. He was really interesting; he didn't really enjoy coding, but he really liked drawing and designing characters on the Scratch platform. I set him up on Scratch, and walked away to check on a few of the other kids, and when I came back, he already had a fully functioning code and was drawing a character sprite to go along with that code. However, a few challenges arose. The computers we were using with the kids were not high-tech at all and were a few years old, making some of them extremely slow. Google Chrome, Scratch, and other apps barely worked. This caused Octavio's Google Chrome to crash multiple times, resulting in him losing his progress, so I decided to let him use my laptop, which was the right choice. By the end of the day, Octavio had made a code with three custom, well-designed characters. The second day was similar to the first, and once the kids left, it was time to get ready for the third day. On the third day, we organized a robotics competition. All of the kids there did robotics, so we had them make robots and whoever could pop the most balloons with the robots won. After the competition, we had snacks and then gave out prizes. During this whole time, Octavio was on my computer designing more game characters. Over the course of the 3 days, Sam Nam and I 3-D printed about 20 small, plastic dinosaurs. We gave these out to the kids as well, and a lot of them seemed to enjoy it. Alexander snapped it in half and pretended to saw its body into pieces, but I pretended to ignore it. I feel that this was an experience that not many are able to have, and I also hope that the kids who were actually interested in computer science, and even the ones who weren't, can become successful later in life and make a ton of money. I really enjoyed teaching and helping kids in something that I am knowledgeable in, and I only hope that I can do this kind of thing again.

Jaemin Choi 10th Chaminade College Preparatory High School

Working with these children during the three-day camp was exceptional. The children were cooperative, excited, and fun. Also, I enjoyed being a teacher and instructing the kids. We taught them how to code, build robots, and build a good community. However, not all the kids were cooperative. Two boys were very hostile most likely because they were raised in a hostile environment. However, we were able to change them through love and peace. With the correct amount of love and care, you can change any person.

Leading up to the three-day camp was months of preparation. During these months of preparation, we talked about different kinds of services we can offer, who to bring in, and our venue. We decided to teach the kids how to code and build robots. The kids we brought in were foster children who were from poorer families to give them a chance of experiencing the future. By showing them our future, one day they might create the cure for cancer, or robots that can save people out of earthquake rubble. Giving unfortunate kids a chance can change the world, every kid deserves a chance. By giving kids a chance at robotics and coding, we can give them an excellent chance to explore a skill that could potentially turn into a very lucrative career. It might introduce them to areas such as drone design, website design, mobile app creation, and video game programming. Programming and other IT-based skills have become an integral part of our modern workforce. With more and more companies switching over to IT-based systems, and with services becoming increasingly complex and customized to meet the unique needs of countless industries. To succeed in robotics takes patience; the courage to work through mistakes and problem-solving skills. Our society is becoming increasingly technologically driven. Although our generation could get away with learning the bare minimum when it came to technology, the same cannot be said for our children. Being computer literate is now mandatory in many fields, and increasingly we are seeing that 3D printing, drones, and advanced machinery are becoming more and more common in various working environments. Robotics manages to combine engineering and programming with creativity and problem-solving, and at the end of it, your kid will have an interactive little toy that they can play with. The result of all their hard work will be right there in their hands, and they can continue to tweak and fiddle with the programming to try for new outcomes. Introducing children to these topics in a way that is fun and engaging is becoming increasingly vital in our ever-evolving technological landscape. IT is becoming indispensable to many industries, and that isn't set to change any time soon. By introducing children to robotics, programming, IT, and crucial problem-solving skills, you are furnishing them with a foundational skill set that could become essential to them in the future. By showing them love and care that they may not have received, they can be more confident and happier. When you're in love, you smile and laugh more. You feel happy with yourself, with your love interest, and with the world.

Everything makes you grin from ear to ear. when you're in love, you stand a little taller and carry yourself with an air of confidence. Make no mistake about it — people in love feel good about themselves. You feel good in your skin.

Samuel Nam 9th Rise Kohyang High School

It was a bright Monday afternoon during Thanksgiving week when children walked into an unknown building full of people they never met before. Their mugshots were taken and were split into two rooms. Mugshots? Were these children naughty when Christmas was around the corner? No! They were there to learn coding and robotics for the first time. This thanksgiving, I volunteered to teach kids, many of whom live in foster homes, robotics and manage the 3D printer, and I am thankful for the experience. On Tuesday morning, a white minivan sped in front of afterschool. Tires screeched. I hopped out of the car and dashed to the door.

"Crap crap crap crap crap crap crap crap crap crap crap," I thought as I ran to the door. I pulled open the door and gasped. I checked my phone. 12:01 it read. "I'm only late by a minute!" I exclaimed.

"Sam! Hurry up and get in here! The kids already started to build their robots! Come help Guadalupe!" a voice shouted back. I dropped my bag near the 3D printer and rushed into the robotics room. "Sam. This is Guadalupe," my friend Daniel told me. I turned and saw a small Mexican girl who look 8 years old. I quickly went over to Guadalupe, said hello, and started to help Guadalupe build her robot so that she could compete in our makeshift robotics competition.

By break, I was managing the 3D printer and was printing out tiny souvenirs. All I did for the next two hours was scroll through Thingiverse, a website where people post 3D models for 3D printing, to look for things that I can print and give to the children.

Before I knew it, kids were walking out saying bye to me. I checked in with my coding teacher and left for home. The day had ended and I was exhausted. I got home and I plopped onto my bed. My mom came in and said, "Your coding teacher said that you guys did great today."

"Really? She said that? I'm not surprised."

"She was concerned because one of the children has severe ADHD, one had autism, and some were known to cause trouble. And another has a condition where he has to go pee every 30 minutes." I looked up to her in disbelief. I was taken aback on how normal the kids seemed. I knew that being foster children wouldn't mean a big difference, but I was surprised by how normal the children acted. I saw every child and watched over them during break, but they seemed like normal children. This came to me as a surprise because I thought that kids with ADHD would act differently from regular children, but in fact they are just children enjoying themselves. This hit me because it told me that I've been wrong about how kids who have conditions don't act very different from normal children.

After I finished studying for school, I went to bed, prepared for the next day.

I was not prepared for the next day. It had rained overnight and the garage has flooded with water. My mom had to go back up and bring boots while wearing fancy sandals and wear the boots to cross the flooded garage to get to our car. This took quite some time and when she drove it into the streets, that's when I got on and my mom floored it.

A white minivan slid in front of the afterschool and I ran out of the car and into the building. I check my phone. 12:11.

"Sorry I'm late," I said as I walked into the robotics room. It was packed and the room was full of breathing bodies. The children were excited for their robotics competition.

"The game was simple," said Daniel after hushing the kids. "Push the rings to the opposite side for one point. Stack a ring through a short pole, you get 5 points, but if you stack it through the long pole, you get 10 points. While you are doing this, you are competing against a team that is also doing the same thing. Get as many points as you can in a minute." The kids were split into teams of two and watching them being excited was fun to watch because Daniel and I planned the game. It meant a lot to me to see someone so excited over something you spent time planning out.

"First, team one and team two. You guys are up." I watched the games go on and cheered for both sides. All the kids were laughing and cheering as they pushed the rings onto the other side. Time flew by as eight teams narrowed down to two, the game changed.

"For the finals, we will have 3 rounds. The best out of three wins. The game will also change for the finals. You will be scoring on your side this time, not the opposite side." The kids were oohing. "Ready, set, GO!"

Time flew by again and kids were choosing their prizes via a raffle system, but there's enough prizes for everyone. Us high schoolers kept on chanting, "Thomas, Thomas, Thomas," because there was a Thomas and Friends toy set and it was the biggest toy on the table. Everybody received a 3D printed souvenir that I personally worked hard on because I had to reprint many of them because they would break easily or the plastic warped mid-print.

"Oh my god these dinosaurs are cool!" exclaimed a boy. The kids played with their brand-new toys until all of them were picked up by their foster parents. We wrapped up the place and went back to our ways. I was fortunate to experience and learn something while volunteering at my afterschool. I experienced joy seeing children happy and excited over little things, and their behavior reminds me of when I was younger. It also made me realize that having mental or physical issues do not define who you are. I previously thought that having a mental or physical disability shaped who a person was, and volunteering revealed to me how

untrue that was. No matter what limitations life may have dealt you, what you do with your life matters much more.

Mincheol Song 9th North Hollywood High School

The 3-day camp we held during Thanksgiving break was overall a great experience for me and I was glad to be part of something where we were able to give back to the community. Throughout these couple of days of volunteering, I was able to realize how thankful I was with the situation I am in now and made me want to continue to serve the people in need. The camp exceeded everyone's expectations and everyone put in a hundred and ten percent into everything that they were assigned. It was great to see the kids so determined to know more about robotics and coding, which helped me want to teach them more.

The preparation was an important part and which took a lot of time and effort to do so. We met every Saturday for almost a month to prepare for this three-day camp, varying from deciding what to teach the kids throughout the camp to sorting all the Vex IQ pieces for the camp. We also had to decide the dates for the camp which was also crucial. For our camp we came to a decision that it would be over thanksgiving break, because then it would be easier for us to volunteer and easier for the kids to come as well, without school interfering with anything. After setting dates for our three-day camp, our next objectives were to decide what to teach the kids and decide what the schedules would look like through the course of this camp. After much thought and consideration, we came with a consensus that there would be two rooms, one for coding and one for robotics. For the coding portion, we decided to teach them basic coding using blocks to help expand the kids' knowledge about coding and for the robotics portion, we printed out manuals that helped guide the kids into building their own robots which then they were able to play a variety of fun games with.

After a lot of preparation for the camp, Thanksgiving break was just around the corner and just like that, it was the first day of our camp. On the first day of camp, we were introducing ourselves to the kids and giving them a glimpse of what they would be learning throughout the three days that they were going to be attending this camp. After giving a brief introduction to our camp, we then got started with our first class. The kids were split up into age groups, with the younger kids going into the robotics class, and the older kids going into the coding class. After a couple hours of nonstop working, we had breaktime, where we were able to get closer with the kids and get to know them better. Overall, the first day was rather a success, and it was a great experience for all of us.

Then on the second day, it was much like the first, and we built robots and learned coding for a couple of hours, had break time, and then worked some more. On the second day of camp, we were able to get closer with the kids and the kids were also more used to the system at our camp now. The second day was full of

joy and excitement for the kids and was a great learning experience for the kids. Now on the last day, all grade levels gathered in the robotics room and we played games with the robots that the kids created from the previous two days. The last day was also filled with positive vibes and we ended our three-day camp on a high note. Overall, this camp was such a humbling experience for me and made me realize that I wanted to be a part of this again when we hold another camp in the future.

Yunju Song 10th North Hollywood High School

Voice of Calling 600 Word Essay of My Experience at the Three-Day Thanksgiving Robotics and Coding Camp by Yunju Song

This past Thanksgiving break, our club, 'Voice of Calling', got together and organized a three-day coding and robotics camp for children currently under foster care. The members of the organization got together every Saturday weeks in advance to make sure the children were satisfied with their experience at our three-day camp. During our meetings, we divided the members into the management, coding, and robotics teams. Each team was responsible for different things. The management team discussed different ways we could raise money, such as selling customized pins and stickers. They also designed posters for advertisement, took care of the registration process, and answered to parent questions via email and on the phone. The coding team reviewed the teaching material that was on Google's CS First. The robotics team organized the parts and pieces for the robot building kits and made lesson plans as well. Days before the camp opened, we got together to finalize lesson plans, make T-shirts, and decorate to welcome the children.

On the first day of our three-day coding and robotics camp for the foster children, our members met up a couple hours earlier to make sure everything was perfect. We were all a little bit nervous, because no one knew what to do expect. Finally, it was noon, and kids started coming in with their parents. I, being the shy person that I am, ran into a room to hide from all the people. As soon as I ran in, I was forced right back out by the supervisor of our event, who also happened to be my uncle, who told me to greet the kids and show them to their classes. On the first day, I was assigned two little boys to teach them coding. Ten minutes into the class, I realized that it would be easier to improvise rather than to stick to the lesson plan. I opened up a blank canvas for both children, and let them draw and create their own characters for them to animate later on. As expected, this was much more successful than having a strict lesson plan. The rest of the day went by smoothly, from taking kids to the bathroom, putting on movies to watch during the break times, and teaching the kids how to animate the little characters on their screens.

The second day was pretty much the same as the first day, only this time, the coding class taught the older kids, from ages nine to twelve. There were many "pros and cons" to working with older kids. First, the older kids were most definitely more mature, and they were able to follow the actual lesson plan. Most importantly, they did not need to be taken to the bathroom every thirty minutes. However, they did complain a whole lot more than the younger kids. Since they had done robotics classes the day before, most of them found the coding classes boring and too childish for them. Even though the first couple minutes were rough, the kids are able to eventually have fun once the class actually started.

On the last day, we decided to have a robotics competition where all the kids were assigned into teams. Each team had to move blocks to their side to gain points. We stayed behind the day before to plan the games ahead of time. The games were very chaotic, and we eventually had to open up the other room for the kids who preferred to quietly making coding projects. After the games, we displayed each child's coding animation projects, and held an award ceremony for the winning team of the robotics games. Every kid received a toy gift and left with a smile. This three-day camp was overall very fun and a great learning experience.