

Interview with Breona McCormick, YWLCs Sophomore



Breona McCormick, a YWLCs 10th grade student, loves building robots. She got turned on to robotic engineering through a summer program last year at Chicago State University. After she experienced building robots with other students, she joined the Young Scientist and Engineers At Work (YSEAW), which is part of the National Society of Black Engineers (NSBE). Earlier this month, Breona attended NSBE's International Convention in Toronto to compete in the Science and Engineering Course and spoken-word poetry concert. Breona, who signs off her letters with the quote "Success is only what you make it," sat down for an interview to share with us everything from her favorite social issue to what she wants to be when she grows up.

How did you get interested in robotics?

I did a summer internship through a program called CSU Prep* at Chicago State last summer. We learned about all of the branches of engineering and how to build NXT lego robotics, which are robots built with tiny lego pieces. During the program, we also took courses in math, chemistry, and humanities and reading/writing.

How did you find out about CSU Prep?

I found out about it on YWLCs' website, which advertised summer programs for students. When I found out that the program was close to my house, that my sister had participated in the program years ago and that I would get a \$500 stipend at the end of the program, I decided to sign up. During orientation, I found out that the same people who are running the program now were running it when my sister went through the program!

What do you like the most about robotics?

I discovered during this program that I didn't have a problem getting up at 7:30am every morning to go build robots. What attracted me the most about robotics was that I could use my hands and the fact that I know I'm good at it. Of course, I didn't know I was good at robotics before I started the program! I just had a lot of fun working on robotics! I also met a lot of great friends, many of them from all over Illinois.

Tell us more about the robotics competitions you recently participated in.

My YSEAW (Young Scientist and Engineers At Work) group traveled to the National Society of Black Engineers' Regional competition, which took place in November 2009 in Columbus, Ohio at the Hyatt Regency Hotel and Convocation Center. In that competition, my group competed in the Robotic Lego Challenge where we had to construct a robot from miniature Legos, program it to move, pick up objects, and respond to light, sound, touch, and ultrasonic sensors. We were awarded the 3rd place prize! Individually, I participated in two additional competitions: the Regional Science Fair, and Regional Talent Show. In both competitions, I was awarded the 2nd place prize. During the Regional Science Fair, I presented on the following topic: *Is there a*

Relationship Between Phosphates and Dissolved Oxygen in the Chicago Waterways – this was the same presentation that I used for this year’s Science Fair at Young Women’s Leadership Charter School.

What’s your favorite class at YWLCS?

My favorite class is Humanities because I like learning about social issues and how to better society as a whole. I also like reading about motivating youth to get involved with different issues such as domestic violence and human trafficking, and I enjoy motivating youth to succeed in life.

What are you most passionate about?

I am most passionate right now about inequalities in our education system.

If you were in Ron Huberman’s position, what would you do to address the inequalities?

I would evaluate every school in Chicago, both public and public charter schools, and look at each school’s performance to understand why a school is not performing well. Every school is different, and each school has its own set of problems, so we need to look at each school to understand what the problems are and address each one individually.

Where do you want to go to college?

I really like Ohio State University because they have tried to recruit me at several engineer conferences and competitions I’ve attended recently. My goal is to have at least a 3.9 GPA by the time I graduate, and get at least a 32 on the ACT. Other schools I would consider attending are Polytechnic Institute of NYU and the University of Hartford.

What do you want to be when you grow up?

I want to be a Mechanical and Robotic Engineer so I can fix machinery and come up with innovative designs. There’s so much you can do with robotics. I’ll be able to build engines, work for the government, work for Apple... the possibilities are endless! I also want to be able to compete in the “Olympics of Robotics” where countries compete against one another in robotics. Also, in light of all of the earthquakes that have happened recently, I would like to design and build buildings that can withstand earthquakes and their aftershocks.

Are there any engineers in your family?

I’ll be the first engineer in my family. I am from a family of school teachers.

What do you like the most about YWLCS?

I really appreciate my teachers and the support they give me.

* The Summer Pre-Freshman Program in Engineering and Science (PREP) at Chicago State University is designed to make students aware, at an early age, of the professional opportunities in engineering and to convince students to take more mathematics and science as a part of their high school course load. The goal of the six week summer program is to increase awareness of career opportunities in engineering in order to facilitate the selection of an engineering major in college. The Program is beneficial to students because it provides critical insight into the engineering profession, the demand of an engineer curriculum and what is expected of them academically and socially in college. For more information about the Program, visit <http://www.csu.edu/engineeringstudies/prep.htm>.