

# VCU RMEP 2016

Phase III





#### Alexis Massenburg

- ♦ I'm a rising 10th grader at Glen Allen High School.
- I'm in the Center for Education and Human Development at Glen Allen.
- This is my 3rd year of participating in RMEP at VCU.
- I'm interested in Biomedical and Nanotechnology Engineering.
- In this year's program, I really liked my instructor and all of the new friends I made. The mentors that came in to speak with us gave me a glimpse into the real world of engineering.
- I learned not be afraid to fail, and how to build things with limited materials.







#### McKenzie Harris

- ♦ I'm a rising 10th grader at Patrick Henry High School
- ♦ I'm in the Advance College Academy at Patrick Henry
- ♦ This is my 4th year at RMEP at VCU
- I'm interested in Chemical and Industrial Systems Engineering.
- ♦ This week









#### Matthew Thompson

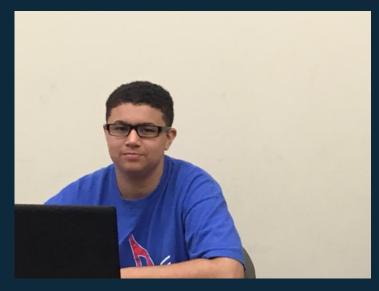
- Rising 11th grader at Clover Hill High School
- Interested in electrical engineering
- ♦ 1st year in RMEP
- Learned a lot about the different fields of engineering, such as civil, electrical, industrial, and computer engineering. I also learned be
- My favorite thing about the program was the people.





#### Kieran Casey

- Rising 10th grader
- Attends Freeman High school
- Interested in weapons engineering
- $\Diamond$  4th year in RMEP
- ♦ I learned about the different fields of engineering and how all genres of engineering work with each other
- My favorite thing about the program were the speakers







life.

## Charles Cheatwood representing Varina High School

Class of 2017
Interested in Bio/Biomedical Engineering
5th and final year in RMEP
Some of the things that I will take away from RMEP are problem searching, problem solving, cooperation, communication, networking, mathematics, first impressions are lasting impressions, and perfection is the best direction. I definitely understand the importance of networking between the mentors, students, and speakers. These qualities will be very helpful as an engineer and in





- Deep Run High School
- ♦ 11th grade
- ♦ 1st year in RMEP
- Interested in Mechanical and Computer Engineering
- This week, I was exposed to several different forms of engineering, some of which I never knew existed. I also learned about the importance of problem solving and team building.







#### Ron Kirklin

I am a rising junior at St. Chris.

This is my first year at RMEP.

I am interested in Biomedical, and Computer Engineering.

I learned a lot of information on the different fields of engineering and how first impressions are lasting impressions.

My favorite project of RMEP was creating the bristlebot.









#### London Hopkins

- ♦ I am a rising Junior at Henrico High School
- My field interests are: Nuclear Engineering, Biomedical Engineering, Chemical Engineering
- ♦ I mostly enjoyed soldering because, it was a new experience for me.
- ♦ I learned that it is not necessarily the materials, but it might just be user error.
- My favorite project was the bristle bots







- ♦ I am a rising junior in the class of 2018 at Glen Allen High school.
- ♦ I am most interested in Aeronautical Engineering.
- ♦ I loved Soldering because it was a new and fun experience.
- My favorite project had to be the Bristle bot project because it taught me if thing don't work be patient and try again.







#### Tim Armstrong

- Rising senior
- Home educated
- I am interests in attending VCU for Biomedical engineering
- I learn a lot about what I can do to prepare myself for my college and professional careers. Some examples of what I learned are; forming 12 month, 2 year, 5 year goals, being intentional and assertive in my search for internships and jobs and to be willing to put in the hard work to get the results I desire.
- I enjoyed hearing about other forms of engineering from individuals who are performing well in their relative fields
- $\Diamond$  I enjoyed the coding project.







# James-Jordan

Meredith

I am a rising 10th grader
I go to monacan high school
I am an aspiring civil engineer
I have been in RMEP for 3 years





Jerome Myers is an engineer who motivated us to never give up on our dreams.

Ishmail Sandiford is an engineer that spoke of career opportunities with Northrop
Grumman

We also had engineers from VDOT to talk to us about civil and bridge engineering

Other guest speakers included a science data analysis, industrial engineers, and Deep Run's Robotics Team













#### Student Mentors





Phase III mentored phase I to help them design and construct a catapult. The purpose was to shoot wooden objects six feet.



Soldering-is a process in which two or more items (usually metal) are joined together by melting and putting a filler metal(solder) into the joint, the filler metal having a lower melting point than the adjoining metal

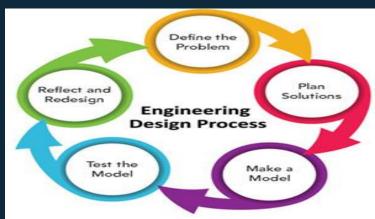
Magnetism-A physical phenomenon produced by the motion of electric charge, resulting in attractive and repulsive forces between objects

Electricity Fundamentals- Concepts associated with the process of creating electricity. These concepts included protons, neutrons, atoms, and electrons for starters. We would also discuss the types of electronic circuits which are series, parallel and series parallel concepts.





### Concepts Continued...



Problem Solving- Steps of the engineering design process. A series of steps that engineers follow to come up with a solution to a problem. Many times the solution involves designing a product (like a machine or computer code) that meets certain criteria and/ or accomplishes a certain task.





# A Fun Day of Coding





We learned about coding from our speaker from the Coding Dojo Macon Pegram



# Thanks for the memories RMEP 2016

