

## EDUCATION

### Marshall High School

IB Diploma (Expected) 2018

Currently pursuing an IB Diploma. Planning on taking these Higher Level courses: Mathematics, Chemistry, Physics, Economics and History.

### Sanskrita Bharati

Successfully completed a distance learning course from Sanskrita Bharati. Samskritam As a Foreign Language (SAFL) is a three-year online distance education program for high school students who wish to learn Samskritam (Sanskrit).

## EXPERIENCE

### Vitreous State Laboratory at The Catholic University of America, *Research Laboratory Intern*

Jun 2017 - Aug 2017

Experimental and theoretical research at The Vitreous State Laboratory (VSL) covers various areas of materials science from cutting edge nanoscale research with the state-of-the-art facilities to large-scale production techniques.

- Assisted in the preparation of various samples for Scanning Electron Microscope (SEM) analysis.
- Researched into applications of volcanic natural glass for nuclear waste vitrification.
- Developed a water quality sensor based on nanomaterials.

### FIRST Robotics Team 5549, *Outreach Coordinator and Programmer*

Oct 2014 - Current

Marshall HS's robotics team participated and was awarded the Rookie All-Star award in the 2015 season.

- Served as Outreach Coordinator and deployed a fast and responsive website for my High School's robotics team with no budget.
- Integrated various technologies into the website for a better user experience.
- Responsible for securing more than \$2000 in grants from various sponsors.
- Helped program the robot using C++. For the 2016 season, also assisted the team in creating a computer vision system using a NVIDIA Jetson TK1 and OpenCV.

### Cyberpatriot Team n0passwd, *Team Captain and Linux Expert*

Sep 2014 - Current

At the center of CyberPatriot is the National Youth Cyber Defense Competition.

- Led my rookie team to achieve Platinum (Top 30%) Status all three years we have competed.
- Responsible for teaching basic Linux system hardening to beginners.
- Created scripts using Bash to automate some processes that are required in the competitions to allow more time for the harder vulnerabilities.
- System hardening included disabling insecure services, removing unsafe applications and securing user accounts.
- Solved forensics challenges which required a unique understanding of the Linux command line interface.

### sysTEMic Solutions VEX IQ Summer Camp, *Lead Programming Instructor*

Aug 2016

One week camp for elementary school students for building and programming a robot.

- Created interactive lessons on the basics of robot programming.
- Taught the students basic programming skills in RobotC.
- Maintained a classroom environment with 30 elementary school students.

## VOLUNTEERING

### North South Foundation, *Math Instructor*

Sep 2016 - Current

Responsible for teaching competition math concepts and strategies to a group of elementary school students

### Kiwix by Wikimedia CH, *Web Developer*

Oct 2016 - Mar 2017

Responsible for setting up and maintaining a web store for Kiwix. The revenues generated from the sales will help further Kiwix's mission of making knowledge more accessible for everyone.

## ACHIEVEMENTS

**Grand Prize**, *Marshall HS Science Fair*

Jan 2017

**Grand Prize**, *Fairfax County Science and Engineering Fair*

Mar 2017

**Distinguished Honor in Technology**, *Optimist Club of Greater Vienna's T. R. Cook Youth Awards of Excellence*

Apr 2017

**Finalist**, *Intel International Science and Engineering Fair*

May 2017