Hamilton High School, 2013-2017

More information at: <u>www.dhruviyer.info</u>

## **Curriculum Vitae**

**Senior Year Coursework:** Honors Linear Algebra, Senior Honors English, AP Spanish Language Y2, AP Chemistry, AP Art History, Honors Science Research

**AP:** Human Geography (5), Calculus BC (5), Physics C Mechanics (4), Physics C E/M (4), English Language (5), US History (5), Biology (5), English Literature (4), US Government (5), Macroeconomics (5), Computer Science (5)

**SAT/ACT:** 1590 (M: 790, ER/W: 800), 35 (M: 34, S: 34, E: 36, R: 36), Math Level II (800), Physics (800), Biology E (780)

GPA/Class Rank: Unweighted (4.0), Weighted (4.88), Rank (6/870)

**Selected Awards:** 1st Place Engineering National JSHS, Broadcom MASTERS Finalist, 1st/2nd/1st AZJSHS, 2nd/1st/2nd AZSEF, Coke Scholar Semifinalist, Hamilton Science Student of the Year 2014/2015

Summer Activities/Internships: MIT Launch (2015), Helios Scholars at TGen (2016)

**Research:** 9th-12th grade 10 hrs/week, 40 weeks/year; My research is focused on Human-Computer Interaction, Machine Learning, and Computational Biology. In 2013-2014, I built a keyboard and mouse interface for quadriplegics using MEMS Gyroscopes and Accelerometers. I extended the project the following year using Machine Learning and the Microsoft Kinect to track facial movements and determine user intent. In 2015, I began interning at the Translational Genomics Research Institute, conducting research on Gene Regulatory Networks and developing a tool called LASSO EDDY

Entrepreneurship: 11th and 12th grade, 2 hrs/week, 40 weeks/year; I attended the MIT Launch Summer Entrepreneurship Program in 2015. The following year, I cofounded Allbeat (allbeat.co), a music discovery app that connects artists and listeners through 11 second previews. As operations director, I set the business model for the company, manage application development, and track investment and expenditure. In 2016, I cofounded Echelon, a REST neural network API dev framework to bring machine learning to IOT devices. I am the lead developer and CEO.

**Robotics:** 10th-12th grade, 20 hrs/week, 20 weeks/year; I am the founding president of FRC Team 5465. In 2015, I was asked by Si Se Puede Foundation CEO Alberto Esparza to start the community robotics team for at-risk and community youth. In our first year, we won the "Rookie All-star" award and competed in the 2015 FIRST world championship.

**Volunteering:** 9th-12th grade, 3-5 hrs/week, 40 weeks/year; I volunteer at the robotics program of the Si Se Puede Foundation. The foundation works to encourage at-risk youth to pursue degrees in engineering. I began by mentoring a team of three students, eventually becoming head mentor and overseeing 80 students and six mentors. I promoted the program on television, at booths, and was a keynote at the foundation's Southwest STEM conference

Chief Science Officer: 11th and 12th grade, 3 hrs/week, 40 weeks/year; I was elected my school's first Chief Science Officer my junior year. The Arizona SciTech statewide cabinet brings together student leaders interested in connecting students, government, and industry to support STEM education. I introduced students in my school to engineering projects and STEM opportunities, gave panel talks at local companies, and discussed my work with Arizona representatives, Gov. Ducey, and the Office of Science and Technology Policy. I was also invited to the White House Summit on Next Generation High Schools and am actively working on the rollout of the National CSO program.