

Education

Case Western Reserve University: Biomedical Engineering| Graduation: June 2021

Illinois Mathematics and Science Academy: High School Diploma

University of Chicago Seminars, KCBD Center: Biomedical Engineering| May 2015 – August 2016

Programming/Software:

HTML/CSS, MATLAB, Javascript

Courses: Molecular and Cellular Biology, Microbes and Disease, Organic Chemistry, Discrete Mathematics

Achievements: Published co-author in Official Journal of the Crohn's and Colitis Foundation, Published author and finalist presenter in iBioGENEius High School Competition, AP Scholar Illinois Junior Academy of Science State Gold

Work Experience

Research in Machine Learning Algorithms and Radiomics at Case Western Reserve **September 2017-Present**

Under the guidance of Dr. Satish Viswanath, I am amidst developing machine learning algorithms and medical image analysis in order to aid pathological advances such as treatment diagnosis and therapeutic procedures done after ablation of prostate cancer. This is done through intensity values acquired through radiomics given by MRI and PET scans.

Research in Electrochemical Sensing at Case Western Reserve **October 2017-Present**

Under the guidance of Dr. Allison Hess-Dunning, I am currently under investigation on processes such as reduced oxidation of graphene to improve signaling of probes in the brain. This improved signaling of electrodes will then be used to track the diffusion of drug through electrochemical sensing to minimize foreign body response of these medical devices in the brain.

Researcher at University of Chicago (Hyde Park, IL): **June 2015 - August 2016**

I investigated Colon Cancer in the lab at the University of Chicago under Dr. Joel Pekow. I conducted various protocols such as Western Blotting and Immunohistochemistry which helped analyze protein expression values correlated to inflammatory bowel diseases. I presented my work in weekly lab meetings and worked with fellow doctors to advance the cause. My work was published in a paper and presented at university seminars and external science fairs.

Intern at Selfie Merchandise (Chicago, IL): **June 2015 - August 2016**

I worked at a start-up company named 'Selfie' and through this company I gained a meaningful insight on the inner workings of a small company. At this internship, an application named 'Selfie' was being created for the iPhone. I tested this app and organized documentation necessary for success.

Leadership/Activities

Biomedical Engineering Society (Case Western Reserve University) **August 2017 – Present**

By attending and managing events focused on creating lasting connections and experiences in the BME field, I will gain management and communication skills as well as expand my knowledge in the latest advancements of the field.

Medical Instrumentation for Nations Under Development (Case Western Reserve University) **August 2017 – Present**

I will repair and test medical instrumentation devices and ship them to nations in need through Medwish International. I will improve my analytic skills and learn the thorough application of mechanical engineering.

President (Indian Student Association) **August 2016 – May 2017**

As president of ISA, I organized events at the executive level while coordinating with an advisor and the student body to spread Indian culture on campus. I improved my organization and leadership skills through this position.

Community Developer (Residential Student Leaders): **August 2016 – May 2017**

As CD, I mentored all of the wing guides as well as organize inter-hall events. This position played a powerful role in the residential environment of my high school and I improved connections with residential staff and students.

Mentor (Girls Learn International): **July 2015 – July 2015**

I joined a summer leadership series at the Serependity Labs in Chicago. This was an organization promoting the individuality of females and encouraged young women around the world to pursue their endeavors as well as myself.

Member (ELEMENT): **December 2015 – January 2016**

I traveled to 1871 Merchandise Mart in Chicago with a group of students to learn in depth about the mechanics of starting a company in entrepreneurship. I received an internship in one of the companies and met many owners of companies.

Volunteering

Desk and Concierge (Edwards Hospitals): **July 2014 - July 2016**

I volunteered at a local hospital. I showed patients to their room and also lead discharge and deliver services to patients' rooms. I familiarized myself with the hospital environment and gained an insight on communication throughout.

Habitat for Humanity (Dade City)

March 2015 - March 2015

I traveled to Florida along with my team of volunteers to aid in building a house in Dade City, Florida. I grew as a team member and person with individuals who sacrificed their time to construct shelter for others.