# Samarth Varma

3rd Year Undergraduate

Department of Electrical Engineering

**Email :** varma.samarth@gmail.com

**Phone :** +91-9725615671

## Academic Qualifications

| Year | Degree/Certificate | Institute | CPI/% |
|---|---|---|---|
| 2018 - Present | B.Tech | Indian Institute of Technology, Kanpur | 8.3 |
| 2018 | CBSE(XII) | Delhi Public School, Bopal (Ahmedabad) | 88% |
| 2016 | CBSE(X) | Delhi Public School, Bopal (Ahmedabad) | 10 |

## Scholastic Achievements

- Secured **All India Rank 623** in **JEE Advanced 2018** among the 2.3 Lakh shortlisted candidates.
- Secured **All India Rank 1076** in **JEE Mains 2018** among 1 million candidates.
- Qualified with **All India Rank 225** in **Kishore Vaigyanik Protsahan Yojana (KVPY)** (Young Scientist Incentive Plan), scholarship program funded by the **Department of Science and Technology of the Government of India. KVPY based admission to B.S. was offered in IISc.**

## Internships

- **Indian Space Research Organisation (ISRO), Ahmedabad** *(April'19- July'19)*
  **Project: 3D Web Visualization**
  **Mentor: Mrs. Shivani Shah**, Scientist SF, Indian Space Research Organization, SAC, Ahmedabad.
  - As a research project, this project was aimed at learning the methods to visualize satellite data, hdf5, netCDF or NRRD formats into a web-based UI. This was done by **Volume Rendering using Web Graphics Language (WebGL 2.0)** which was released in 2017 that uses Ray Casting and OpenGL ES 3.0 Shading Language.
  - WebGL 1.0 and 2.0 is used in several Web Applications as it doesn't require any plug-ins. Used Three.js which uses WebGL 2.0 API.
  - Main Programming Library: Three.js (Javascript).

- **Walmart Global Tech (Online)** *(Current)*
  - As an intern in InfoSec Engineering Dev Team of Walmart Global Tech, contributed in ongoing projects of the team, namely, PingFed, PingAccess and CI Azure Management Microservices.
  - Worked in both FrontEnd (React) and BackEnd (Spring MVC) of these RESTful powered Web Applications.
  - Brought Several Enhancements in the PingFed and PingAccess Portal including writing APIs like Timed Auto Rejection.
  - Wrote Several Unit Tests with JUnit and Mockito for CI Azure Management Project. Currently working on Integrating Testing for the same.

## Technical Skills                                                      *exposure

- **Programming Languages:** C, C++, HTML, LaTeX, Python, Javascript, Java, Arduino*
- **Libraries/Frameworks:** WebGL(API), three.js, Spring MVC, ReactJS, JUnit, Mockito
- **Software:** Autodesk Inventor, Autodesk AutoCAD, Autodesk fusion, CAM, Octave*, Aliza*

## Relevant Courses

| | |
|---|---|
| Partial and Ordinary Differential Equation | Probability and Statistics |
| Fundamentals of Computing | Linear algebra and Differential Equations |
| Real and Complex Analysis | Machine Learning for Wireless |
| Mathematics for Computer Science | Introduction to Machine Learning |
| Data Structures and Algorithms | Algorithmic Toolbox (Coursera) |

## Extra-Curricular Activities

- Worked in the **National Service Scheme** (NSS) for 2 semesters, which is aimed to instill the idea of social welfare in students. Carried out door-to-door service in the campus.

- Strong foundation in technical photography basics
  - Composed and Directed shots including editing for the course Art105 - **Introduction to art of video making.**