

Date of Birth: 05 December 2001  
Languages known: English, Hindi, Gujarati

## EDUCATION

### MARCH 2017 – APRIL 2019

#### HIGH SCHOOL, THE NEW TULIP INTERNATIONAL SCHOOL, INDIA

Completed my senior year in high school with mathematics, physics and chemistry being my core subjects. My final score for all my subjects is as follows:

- Chemistry – 100/100
- Mathematics – 99/100
- Physics – 99/100
- English – 93/100
- Physical Education – 100/100

Awarded with the “Student of the Year” trophy for securing the first rank in my state (Gujarat) in AISSEE (All India Senior School Certificate Examination), conducted by the Central Board of Secondary Education of India in March 2019.

### SEPTEMBER 2019 – PRESENT

#### COMPUTER ENGINEERING, UNIVERSITY OF TORONTO, CANADA – 4.0 GPA

I am an engineering student at the University of Toronto and my courses include:

- Linear Algebra, with MATLAB – (99/100)
- Electrical Fundamentals – (98/100)
- Integral and Differential Calculus II – (100/100)
- Dynamic and Static Mechanics – (97/100)
- Engineering Chemistry and Material Strategies – (92/100)

## SKILLS

- C programming experience (2 years) (Completed three courses in Modular Programming and Memory management with an aggregate of 98%)
- Competitive programming (3 years) [ 14<sup>th</sup> Rank in University of Toronto Clan on CodeWars ] - <https://www.codewars.com/users/HackerPanda>
- Machine learning integrated Computer Vision (1 year)
- Group project management with MS Project (1 year)
- Advance mental mathematics – UCMAS (All eight levels completed)
- Public speaking (6 years of experience)
- Coding experience in Python (3 years) (Developed many computer imaging models, some integrated with neural networks, designed games and primarily use it along with MATLAB for data analysis)
- MATLAB [Data Analysis] experience (2 years)

## EXTRA-CURRICULARS

- Participated in NewHacks 2020 and made the first phase of my Smart Traffic Signal Project.
- Member of the Electrical section of the RoboSoccer team at University of Toronto Robotics Association (UTRA).

- Senior design and test manager of Team Kai that built a glider using Fusion 360 to compete in the University of Toronto Fusion Design Association (UTFDA) Glider Competition.
- Co-founder and secretary of the literary club at Delhi Public School, Gujarat, India in 2017.

## LEADERSHIP

- Successfully lead a team of six members in analyzing the impact of floods on the tourism industry of the Toronto Island and designed an effective solution that was financially viable.
- Successfully played the role of Project Manager by organizing and managing workflow in a team of six to design a lightweight portable lift that helps quadriplegics to transfer between wheelchair to elevated surfaces like bed.
- Participated in the Youth Leadership Program by Toastmasters International and was awarded as best speaker, best table topics speaker and best evaluator in a range of different competitions.

## PERSONAL PROJECTS

- Working to convert sign language hand gestures to spoken languages like English. Phase 1 won the best New Hacks award at the NSBE Hacks 2020. Project Code: <https://github.com/pandayah5/Visual-sensing-project>
- Developed an artificial intelligence algorithm based on minimax algorithm to play “Reversi” in C and TicTacToe in Python. Project Code: [https://github.com/pandayah5/TicTacToe\\_AI](https://github.com/pandayah5/TicTacToe_AI)
- Developed a “COVID-19 InfoBot” that uses web scraping to collect updated and authentic information. Project Code: [https://github.com/pandayah5/COVID-19\\_InfoBot](https://github.com/pandayah5/COVID-19_InfoBot)
- Developed the “WoundSensor” that uses OpenCV to scans the wound and computes the actual area of the wound. Project Code: <https://github.com/pandayah5/WoundSensor>

## WORK EXPERIENCE

- Software Content Specialist – ‘DEEP’ Engineering Outreach at the University of Toronto, Canada
  - Developed the “Computer Imaging” course that teaches the OpenCV library in python.
  - Developed the “Data Analytics using MATLAB” course.
  - Successfully collaborated with two instructors to develop strategies to deliver the course content.
- Data Analyst in Blue Sky Solar Racing Team, Canada
  - Used MATLAB and data visualization techniques to analyze and improve the performance of Viridian (The solar car that ranked 11<sup>th</sup> in the world solar challenge 2019).
  - Developed strategy that improved the battery performance by 20% and predicted the optimum speed based on parameters like solar irradiance, latitudes, longitudes, azimuth and elevation angle.
  - Developed strategy to significantly reduce time taken to complete the race for the upcoming the World Solar Challenge 2021 in Australia.

## HONORS AND AWARDS

- 2<sup>nd</sup> Rank in NSBE Hackathon organized by University of Toronto (2020)
- 1<sup>st</sup> Rank in Bloomberg First Time Hack Challenge (2020)
- University of Toronto Dean’s Honor Award (2020)
- Central Board of Secondary Education Grade 12 - Gujarat State Topper (2019)
- University of Toronto International Scholar’s Award scholarship (2019)
- HackerRank Golden Badge Award in Python and Silver Badge Award in C. (2020)
- “Tallent-ex Competition” State Rank - 7, Zonal Rank - 9, All India Rank - 139 (2018)
- National Science Olympiad Gujarat State Rank - 23 (2017)
- Rotary International Inter-School Quiz 2nd position (2017)
- Indian National Talent Search Examination Merit Certificate (2017)
- Certificate for outstanding performance in ASSET [Science and Mathematics] (2017)
- Scholar certificate for the academic session (2016)
- Distinction – All India Mathematics and Science Olympiad (2015)
- Merit Academic Excellence Award (2014 and 2015)
- Platinum award in SIMS Mathematics contest (2012)
- Merit award in SIMS Science contest (2012)