

Gautam Anand

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Education

Sanskriti School, Chanakyapuri (12th Grade)

New Delhi, March 2007 – Present

- Central Board of Secondary Education

University of Michigan, Ann Arbor, USA

Ann Arbor, June 2018 – July 2018

- Attended the Michigan Math and Science Scholars program for the course 'Graph Theory'. In this course, I learnt the basics of Graph theory and its numerous applications in the real world. I developed graph based algorithms to model real world problems, which in turn helped me enhance my problem-solving skills.
- Advisor: Prof. Dr. Douglas Shaw

Stanford University, California, USA

California, June 2017-July 2017

- Attended a pre-collegiate program titled 'Mathematical Puzzles and Games'. In this course, I learned about various Mathematical games and ways of winning from any possible scenario, by simply combining logic and Maths. The most interesting part of the course was designing an original method to solve the 3x3 Rubik's cube.
- Advisor: Prof. Dr. Raphael Holmes

Projects

Smart Farming - A Crop Output Prediction Model

New Delhi, May 2019 - Present

- Surveyed 38 farmers and designed a model to predict crop outputs, by considering variables like weather/climate, land area, crop type, soil type, seasonality and nourishment provided to the crops (eg. fertilizer use, irrigation techniques).
- Used Machine Learning techniques like Regression and Random Forest.
- Using this model, farmers can decide beforehand, which factors to change (amongst those that are under their control) to match their target yield. This way farmers can make the best use of their land, develop a strategic farming approach according to the type of land and crop, rectify their own mistakes in crop nourishment and eventually protect themselves from economic losses like debt traps.

Roof2Roots- A self-created rain-water harvesting cum filtration unit

New Delhi, April 2018 – Oct 2018

- Collaborated with the Sarvodaya Vidyalaya school on a project on water conservation.
- Used natural materials like Corn Cob, bark of trees, charcoal etc. to build the complete working model
- Through the scaling up of this project, 10,000 litres of water can be stored and used during the rainy season.
- Planted 12+ different plants using purified and oxygenated water from the Roof2Roots model.
- Sensitised 65 percent of the students and staff members.
- Link - <https://rooftworoots.wixsite.com/website>

Work Experience

Magppie International, Data Analysis Intern

New Delhi, May 2019 – July 2019

- Worked with the Magppie Data team to analyze the past sales trends of various products and suggest actionable insights to improve future sales, as well as better predict the supply and demand.
- Used concepts from foundational statistics and time series modeling to carry out my research.

Concept Circles, Assistant Developer

New Delhi, December 2018

- Used basic Python Algorithms with Socket.IO and database MySQL to build a Chatbot that will be launched by the company in 2020.

Jaipur Golden Hospital, Trainee

New Delhi, Oct 2018 – Dec 2018

- Worked under Dr. Anil Dadhich in handling patient protocol-learnt remedial strategies and emergency procedures at the casualty department of Jaipur Golden Hospital.

Uber Technologies, Shadow Observer

Palo Alto, May 2017 – June 2017

- Shadowed my sister Radhika Anand, Data Scientist in the Strategic Finance Team at Uber. During this time, I received training from her and observed her day-to-day dealings and working procedures as a Data Scientist. I learnt the basics of using SQL for data pulling and R (packages: dplyr & ggplot) for data manipulation and building meaningful visualizations.

Research

Journal - International Journal of Innovations in Applied Sciences & Engineering

2016

- Wrote a Research Paper titled 'Applicability Of Machine Learning Technique In Developing A Student Assessment And Performance Framework.' (Link - http://ijase.com/images/short_pdf/1571911828_22_Gautam_Anand.pdf)

Journal - International Journal of Research in Science and Technology

2017

- Wrote a Research Paper titled 'Analysing The Sign Language - Parameters Based On Markov Model. (Link - http://ijrst.com/images/short_pdf/1571910214_08_Gautam_Anand.pdf)

Self Conducted Research

- Devised 6 unique and innovative methods to conduct simple mathematical operations (multiplication, squares of numbers) (Link - <https://www.gautamanand.net/wp-content/uploads/2019/11/Copy-of-MATHS-TRICKS-1.pdf>)

Honors - Academic

International

- **College Board** - AP Scholar with Distinction 2019

National

- **Foundation For Young Innovators** - My Smart Farming model has been selected in the top 10 submissions across the country and I have been given a Coursera Scholarship of 5 courses (300\$). In the next round on the 23rd of November, I will pitch the idea to prominent Indian investors. (Link - <https://docs.google.com/document/d/12Ydfw97K-fNKMkiKGrABMIH0e2oGfKUgVOpWLWqMPtg/edit?usp=sharing>) 2018-2019
- **Ministry of Petroleum and Natural Gas** - Secured Gold in the quiz on Oil and Natural Gas Conservation' 2019
- **Shri Ram College of Commerce - Math-O-Mania** - Stood 6th in a multiple round Math competition out of a pool of 230+ teams all over India 2019
- **Times NIE Think and Learn Challenge** – Cleared Round 1 and qualified for the City Finals 2016
- **Brainobrainfest** - Completed 9 levels of Brainobrain's Abacus Program and declared 'Champion' in the National Abacus Competition 2011-2015

School

- **Sanskriti School, Chanakyapuri** - Academic Excellence for 5 consecutive years (6,7,8,9,10) - Grade A1; Overall CGPA of 10 in 9th 2013-2018
- **Bal Bharati Public School - Byte.it** - 1st position in the Information Technology (IT) Quiz and 2nd position in the IT Symposium 2018
- **Science Olympiad Foundation** - Secured 8th position out of a pool of 150+ applicants in grade 11 in the International English Olympiad 2018
- **Times NIE Student of the Year Award** - Selected as the school entry from a pool of 210 + students 2017

Awards and Honors- Non-Academic

Model United Nations

- **INTRA SMUN** - Honorable Mention, Delegate of Iran 2017
- **SHISMUN** - Verbal Mention, Delegate of UK 2017
- **INTRA SMUN** - Best Position Paper, Delegate of Central African Republic 2016

Guitar

- Have played at occasions like school assemblies and Christmas celebrations. Also shot a Youtube video (<https://www.youtube.com/watch?v=YrFv5SbFOKA>). Taken the following exams
- **Trinity School of London** - Grade 2 (90%) - Distinction 2016
- **Rock School London** - Grade 1 (87%) - Merit 2015

Leadership Positions

- **Shadow Captain** of Prakriti House at Sanskriti School 2018-2019

Led and guided 500 + students of my House in various activities like March Past, patriotic singing, etc. and ultimately contributed towards winning the House Cup at the end of the year.

- **Grade Representative** of Grade 10 at Sanskriti school 2017-2018

Represented the day-to-day school problems faced by students like broken chairs and lockers, student-teacher issues to a higher authority.

- **House Representative** of Prakriti House at Sanskriti school 2017-18
- **Club Participation** - Member of Alpha Maths Club and Neutrino Physics Club 2017-Present
- **Captain** of the School Cricket Team 2013- 2018

Workshops and Courses

- Completed the course Programming with Python for Data Sciences at the National Institute of Information Technology (NIIT). 2018
- Attended a Workshop on 'Machine Learning and AI' at IIT Delhi and created a basic Chat-Bot, Face-detection system, Speech-to-text conversion system using Python 2018
- Attended the Design Thinking Workshop at the Ardee School. Learnt the core skills of design thinking and then applied those to make a prototype of damage preventable eye-glasses for mine and factory workers. 2018
- **Courses on edX and Coursera:** 2016-Present
 - Statistics and R, (Harvard University)
 - Data Science Ethics, (University of Michigan)
 - Entrepreneurship In Emerging Economies, (Harvard University)
 - Programming for Everybody (Getting Started with Python), (University of Michigan)
 - Launch X : Becoming an Entrepreneur, (Massachusetts Institute of Technology)
 - Game Theory, (Stanford University and The University of British Columbia)
 - Think Again I: How to Understand Arguments (Duke University)
 - Entrepreneurship 1: Developing The Opportunity (Wharton, University of Pennsylvania)
 - Entrepreneurship 2: Launching your Start-Up (Wharton, University of Pennsylvania)
 - Work Smarter, Not Harder: Time Management for Personal & Professional Productivity (University of California, Irvine)
- Graduated as an Amateur Astronomer after successfully completing the Astronomy for Beginners module with SPACE. 2015

Blogs

- Title - "How to Integrate AI into your Business?" <https://www.gautamanand.net/how-to-integrate-ai-into-your-business/>

- Title - "How Marketers are Using Chatbots to Increase Sales?" <https://www.gautamanand.net/how-marketers-are-using-chatbots-to-increase-sales/>
- Title - "Peer Pressure" <https://www.gautamanand.net/peer-pressure/>
- Title - "What is the Best research Topic for Data Science?" <https://www.gautamanand.net/what-is-the-best-research-topic-for-data-science/>
- Title - "Evolution" <https://www.gautamanand.net/evolution/>
- Title - "What is the future of Data Science?" <https://www.gautamanand.net/what-is-the-future-of-data-science/>

Sports

Cricket

2012-Present

- 1st position in the 'Sub-Junior National Double Wicket Cricket Championship' held at Bal Bharati Public School for 3 years- 2017, 2018, 2019
- Secured prize of 'Daksh Puruskar' for Excellence in Sports, 2016-2017
- Secured prize for Best Player-Cricket in the Annual Athletic Meet, held at Sanskriti School, 2015 and 2016
- Man of the Series at Triangular Cricket Series at Rishikesh
- Best Batsman award at BBPS Tri-Cricket Series

Athletics - High Jump

2016-17

- 2nd position in the Central Board of Secondary Education Cluster Athletics Tournament High Jump event, 2016-17

Chess

2015-17

- 2nd position in the Central Board of Secondary Education Cluster Athletics Tournament High Jump event, 2016-17

Community Service

Prisoner Reformation and Rehabilitation Program, Volunteer

April 2019-June 2019

- Spent time closely with prisoners and spoke to them about their life - living conditions, family, earnings etc.
- Actively marketed the products made by jail prisoners among various corporates under their Corporate Social Responsibility (CSR)

Prime Minister's Tuberculosis Free India Campaign

May 2019-June 2019

- Performed door to door screening of TB patients in Haiderpur village as part of the PM's mission to make India TB free by 2025.

Sarthak Prayas (Non Profit Organization), Volunteer

June 2018-August 2018

- Arranged singing and dancing competitions and IQ-based activities for underprivileged children.
- Organized blood donation camps and spread awareness about donating blood and other social causes.
- Note: Attended the Michigan Math and Science Scholars program for a brief period in between but resumed activities as soon as I was back.

North Ex Educational Society, Sparsh School, Teaching Volunteer

October 2017-December 2017

- Received the award for the 'Best Volunteer' for conducting classes for children on topics like Technology and Entrepreneurship that weren't a part of their regular school curriculum

Bharatiya Netraheen Kalyan Parishad NGO, Teaching Assistant

April 2016-April 2017

- I taught Computer Applications to visually challenged girls of Grade 11 and 12.
- Volunteered as a Reading and Writing help for the girls' exams.

