

Varun Ramanathan

varun16112@iiitd.ac.in • +91 8800-64-8545 • <http://varunramanathan.github.io>

EDUCATION

- IIIT Delhi**, New Delhi, India
Undergraduate Student (B.Tech) Aug 2016 – present
• Major: Computer Science and Applied Mathematics
• Cumulative GPA for two semesters: 9.43/10

- Venkateshwar International School**, Sector 10, Dwarka, New Delhi, India
12th Grade Apr 2015 – Apr 2016
Percentage: 94.6

RELEVANT COURSEWORK

- Courses completed (grade point / 10) Aug 2016 – Apr 2017
Introduction to Programming (10), Linear Algebra (10), Systems Management (9), Data Structures and Algorithms (9), Probability and Statistics (10), Introduction to Engineering Design (9), Competitive Programming 1 (8)
- Courses in the present (3rd) semester Aug 2017 – Nov 2017
Advanced Programming, Discrete Mathematics, Real Analysis 1, Number Theory, Computer Architecture and Operating Systems
- Courses in the next (4th) semester Jan 2018 – Apr 2018
Analysis and Design of Algorithms, Theory of Computation, Abstract Algebra, ODEs and PDEs, Combinatorics and it's Applications

PROJECTS

- Classroom Booking System Oct 2017 – Nov 2017 (ongoing)
 - Project: The purpose of this project is to create a desktop based JavaFX application to manage classroom bookings at IIITD. It is a part of the Advanced Programming course.
 - Focus: JavaFX, Object Oriented Programming, UML, Threads, Version control, Managing 1000s of lines of code
- IntelliWater Jan 2017 – Apr 2017
 - Project: The aim was to develop a prototype for an automated irrigation system. Prevention of over-irrigation was one of the objectives of the project, along with coming up with an effective way of managing irrigation. The project was a component of the course - Introduction to Engineering Design.
 - Focus: Automation and management of irrigation
 - Tools and tech: Arduino, Soil moisture sensors, HTML, CSS, Javascript
 - My role: I developed the front-end for the project using HTML and CSS. I wrote about 400-500 lines of code.
- Roomie Oct 2017 – Nov 2017
 - Project: Roomie is a web application that pairs roommates on the basis of their answers to a questionnaire. It was partly inspired by the roommate pairing system at Harvard, where roommates are handpicked by the Freshmen Dean's Office.
 - Focus: Web-development (Back-end and front-end)
 - My role: This was my first project in college. I learnt HTML and CSS through this project.

INTERNSHIPS / SUMMER SCHOOLS

- ACM-India Summer School on Graph Theory and Graph Algorithms, Jun 2017 – Jul 2017
IIT Gandhinagar
 - The objective of this summer school was to provide a forum for learning and discussing several foundational aspects of structural graph theory, interleaved with perspectives from algorithmic graph theory. The lectures in this school were designed to provide exposure to both these aspects, and also emphasized engineering aspects by having lab sessions where participants implement several of the algorithms that they encounter, understand benchmarking techniques and explore real-world data sets.
 - Due to unforeseen circumstances, I had to quit the summer school after 4 days.
 - [Link] to ACM India Summer Schools page.
 - [List] of selectes students for every Summer School.

AWARDS & SCHOLARSHIPS

- Dean's List for Academic Achievement, 2016-17, IIITD 2016 – 2017
Awarded to the Top 20 among 275 students.

	<ul style="list-style-type: none"> ▪ CCRT Scholarship for playing the Mridangam Awarded by the Centre for Cultural Resources and Training (CCRT, Government of India) under the Cultural Talent Search Scholarship Scheme The Scheme is aimed at providing facilities to outstanding talented children selected in the age group of 10 to 14 years studying either in recognized schools or belonging to families practicing traditional performing arts for getting specialized training in various cultural fields such as traditional forms of music, dance, drama as well as painting, sculpture, crafts and literary activities. Top 8 (National) 	May 2012
CAMPUS ACTIVITIES	Évariste- the Math Club, IIIT Delhi	Apr 2017
	<ul style="list-style-type: none"> ▪ Founding Member <ul style="list-style-type: none"> • Évariste is the math club of IIIT Delhi. The activities of the club such as the zero-prerequisite competition, advanced competitions, weekly problem solving and seminars are organized with the aim: <ol style="list-style-type: none"> 1. Discovering and appreciating areas and topics in mathematics which are new to students, and 2. Recreational problem solving which supports 1. 	
	<ul style="list-style-type: none"> The club was founded by Siddhartha Jain and Peeyush Kushwaha. 	
	<ul style="list-style-type: none"> ▪ Organiser of a Zero Prerequisite Contest on Intro to Computational Geometry 	Oct 2017
	<ul style="list-style-type: none"> • A ZPC or a Zero Prerequisite Contest is an event in which participants are presented with some basic theory of a mathematical field and are then asked to solve some problems that require application, derivation of new conclusions, proofs, and reasoning if a given assertion is true or not. 	
VOLUNTEER EXPERIENCE	AudioBytes - The Music Club, IIIT Delhi	Sep 2016 – present
	<ul style="list-style-type: none"> ▪ Member 	
LANGUAGES	Summer Camp 2017, IIIT Delhi	Jun 2017 – Jul 2017
	<ul style="list-style-type: none"> ▪ Student Volunteer <ul style="list-style-type: none"> • I was a student volunteer at IIIT Delhi Summer Camp 2017. This is a summer camp/school organised every year for children from underprivileged backgrounds. It is targeted towards students studying in 8th-10th grade. • My role: I was a part of the team of that taught the children "Problem Solving". We covered various topics - general puzzles, introduction to logic and proofs, sudoku, etc. Apart from that, I also organised karaoke sessions and taught drumming/singing to students who were interested in music. • The effort was taken into account for "Community Work" credits which are a mandatory requirement for graduation at IIIT Delhi. • Hours of input: 80 hours or equivalently, 2 credits 	
SKILLS	Java, Python, Object Oriented Programming, HTML, CSS, basic Shell-scripting, basic L ^A T _E X	
INTERESTS	Mathematics, Theoretical Computer Science, Machine Learning, Music (Carnatic music and metal genre), playing the Mridangam, Drumming, Beatboxing, Teaching (Math and CS), Long distance running	

[CV compiled on 2017-10-09]