Varun Ramanathan

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

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.
- [Github repository]

■ 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
- [Github repository]

INTERNSHIPS / SUMMER SCHOOLS

■ ACM-India Summer School on Graph Theory and Graph Algorithms,
IIT Gandhinagar   Jun 2017 – Jul 2017
- 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.

- 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   May 2012

  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)

CAMPUS ACTIVITIES

Évariste- the Math Club, IIIT Delhi

- Founding Member   Apr 2017
  - 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 of:
    1. Discovering and appreciating areas and topics in mathematics which are new to students, and
    2. Recreational problem solving which supports 1.
    The club was founded by Siddhartha Jain and Peeyush Kushwaha.

- Organiser of a Zero Prerequisite Contest on Intro to Computational Geometry   Oct 2017
  - 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.

AudioBytes - The Music Club, IIIT Delhi

- Member   Sep 2016 – present

VOLUNTEER EXPERIENCE

Summer Camp 2017, IIIT Delhi

- Student Volunteer   Jun 2017 – Jul 2017
  - 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

LANGUAGES

- English: Fluent (speaking, reading, writing).
- Hindi: Fluent (speaking, reading, writing).
- Tamil: Native language; Fluent (speaking) .

SKILLS

Java, Python, Object Oriented Programming, HTML, CSS, basic Shell-scripting, basic LaTeX

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*]