

## SANJAY SEETHARAMAN

16PT32

Father's name	Seetharaman M V	<b>Permanent Address</b> 857, 11th Street, Syndicate Bank Colony, Anna Nagar West Extn., Chennai, Tamil Nadu – 600101.
Gender	Male	
Date of Birth	1 <sup>st</sup> November 1998	
Languages known	English, Tamil, Hindi	
Email	sanjayms0111@gmail.com	
Mobile	+91-97907-84201	

### ACADEMIC QUALIFICATION

Currently pursuing 4<sup>th</sup> year of 5 year Integrated M.Sc. Theoretical Computer Science at Department of Applied Mathematics and Computational Sciences at PSG College of Technology.

### SKILL SET

Languages	C++, Python, R, C, Bash, Java, MySQL
Platform	Linux, Windows
Tools	LaTeX, Git, Matlab, Qt, GTK

### AREAS OF INTEREST

- Design and Analysis of Algorithms
- Optimization Techniques
- Theory of Computation
- Discrete Mathematics

### ACADEMIC RECORD

Semester	I	II	III	IV	V	VI
GPA / 10	9.67	9.85	9.46	9.20	9.71	9.73

Course	Institution	Board	Completion By	Marks (%)
X	SBOA School & Junior College	CBSE	2014	100
XII	SBOA School & Junior College	CBSE	2016	93.8

## RESEARCH EXPERIENCE

- **Research Intern**, *TCS Research*, Pune. May 2019 - November 2019.  
Adversarial Attacks and Defenses in Machine Learning Systems.

## ACADEMIC PROJECTS

- **2Pac-Man** A bot that plays Ms Pac-Man using MCTS. An implementation of the research paper **Fast Approximate Max-n Monte-Carlo Tree Search for Ms Pac-Man** (S Samothrakis et al.).
- **Divine Text** A custom text completer built in C++ for Qt text widgets based on **Burkhard Keller Tree** (BK Tree), a data structure specialized to index data in a metric space. It solves the problem of searching a set of keys which is closest to a given query key.
- **Unbeatable Chopsticks** A game built in Qt(C++) that has a bot which plays Chopsticks using **game trees**. Human player plays against the bot which with perfect play, can find an optimal strategy from any point of the game using game trees.
- **Cube Timer** A Rubik's cube speedsolving timer with a built-in scramble generator built in Qt(C++). The stopwatch collects and helps one training stats by calculating the important averages and tracks the progress of the user.
- **Distributed MST** An implementation of the research paper **A distributed algorithm for minimum-weight spanning trees**(RG Gallager et al.) that works based on client server model to solve the minimum spanning tree problem in  $O(V \log V)$ .
- **Timetable Scheduler** An application that generates a timetable with least collisions based on the lists of rooms, timeslots and courses given by the user. An implementation of the research paper **Solving timetable scheduling problem using Genetic Algorithms** (B Sigl et al.).

## EXTRA-CURRICULAR ACTIVITIES AND ACHIEVEMENTS

- Competitive Programming:  
    **Codechef**: Highest Rating : 1874 [Purple]  
    **Codeforces**: Highest Rating : 1639 [Expert]
- Secured rank 615 in pre-elimination round of **Codechef Snackdown 2017**
- Qualified for **ACM ICPC 2017** - Amritapuri Regional Finals
- Passed **CCDSAP foundation level** exam held by Codechef
- Regional Runner up, **TCS IT WIZ 2014, 2015**
- **Taekwondo** 1st Dan Black belt
- **NCC** A certificate

## DECLARATION

I, Sanjay Seetharaman, do hereby confirm that the information given above is true to the best of my knowledge.

Place: Coimbatore

Date: 18.01.2020

(Sanjay Seetharaman)