

MYLAVARAPU SAI PRAVEEN

15PT20

Father's name	Mylavarapu Rama Mohan	Residential Address
Gender	Male	304, Solitaire Residency,
Date of Birth	24 th August 1998	P&T Colony,
Languages known	English, Hindi, Telugu, Tamil, French	Gandhi Nagar,
Email	saipraveenmylavarapu@gmail.com	Hyderabad,
Mobile	+91 73586 34838	Telangana – 500080.

ACADEMIC QUALIFICATION

Currently pursuing 3rd year of 5 year Integrated M.Sc. Theoretical Computer Science in Department of Applied Mathematics and Computational Sciences at PSG College of Technology.

SKILL SET

Languages	C, C++, Python, Java
Back-End	PHP, MySQL
Platform	Windows, Linux
Tools	MATLAB, Android Studio

AREAS OF INTEREST

- Data Structures and Algorithms
- Object-Oriented Programming

ACADEMIC RECORD

Semester	I	II	III	IV
CGPA / 10	7.17	7.70	7.86	7.89

Course	Institution	Board	Completion By	Marks (%)
XII	Narayana Junior College, Hyderabad	TSBIE	2015	94.4
X	Sri Venkateswara Bala Kuteer, Guntur	CBSE	2013	89.3

NON-ACADEMIC PROJECTS

- **Bouncing ball game** for Facebook App Center. Used Box2D, an open source 2D game engine for physics graphics and Heroku for hosting in the cloud. Live at apps.facebook.com/praveengame.
- **NPTEL Scrapper**, a Python script to download all notes of a course on NPTEL as they didn't provide this option.

ACADEMIC PROJECTS

- **Rubik's Cube Solving Robot**, an Arduino robot that can solve Rubik's cube mechanically. The current state of the cube is to be given in a user-friendly GUI. A stepper motor for rotating and a servo motor for pushing the cube are used. Kociemba's algorithm is used for solving Rubik's cube.
- **PSG Bank**, a full stack web application, simulating a bank where customers can deposit or withdraw money, transfer to other users and view their transaction history. Managers have another portal where they can add or remove new customers and modify their details. This was implemented using DBMS concepts in MySQL database. Live at <http://psg-bank.herokuapp.com>.
- **Robot path finder**, a program which gives the best path between source and destination with obstacles in between. Best path here is the path that goes as far as possible from obstacles (safe path) and is as short as possible. Implemented using an IEEE paper "Genetic Algorithm Based Path Planning and Dynamic Obstacle Avoidance of Mobile Robots" by Woong-Gie Han, Seung-Min Baek and Tae-Yong Kuc.
- **Xiao Na**, an interactive chatbot developed in Python using PyQt for the UI and various APIs to get answers from the Internet. It can answer questions about the weather, distance between places, meaning of words, random quotes and many more.
- **Chocolatier**, a chocolate business simulation game written using Object-oriented concepts in C++. The basic theme of this game is to do chocolate business by buying raw materials, manufacturing chocolates and selling those for higher profits. When the user plays without using strategy, he might end up in a situation where he does not have any money to manufacture chocolates or buy raw materials and hence the game ends.
- **KuDoSu**, a Sudoku solver program implemented in C. Solved using naive and vertex coloring methods. A graph was modeled by considering each box as a node and two nodes are made adjacent when they cannot have the same number. Then the graph-coloring algorithm has been applied to this graph where each color is mapped to a number.

EXTRA-CURRICULAR ACTIVITIES AND ACHIEVEMENTS

- Secured **10th** position in PSG Tech Math Olympiad 2016.
- Secured **12th** position in PSG Tech Math Olympiad 2017.
- Secured **23rd** position in PSG Tech Math Olympiad 2018.
- Secured **first** position in Dark Knight at Kriya 2015.
- Contributes to open-source - github.com/praveenmylavarapu.