Sourabh
Aggarwal

+91 7986311572

https://github.com/sourabh2311

111601025@smail.iitpkd.ac.in

Education

B. Tech. CSE IIT Palakkad | 2020 | CGPA: 9.69/10 (Current)

Class XII Sri Guru Ram Rai Public School | 2015 | 81%

Class X Delhi Public School Jhammat Ayali Kalan Ludhiana | 2013 | 78%

Extra-Curricular

Actively setting contest problems in Institute's Coding Club.

Have won medals in various BasketBall Competitions like Takshilla.

Participated in various Institute's Cultural events like "Ek Bharat Shrestha Bharat".

Technical Skills

Competitive Programming	Have solved many problems and have participated in various algorithmic competitions
Programming Languages	C, C++, C#, Dart, MIPS, Prolog, Python, Rust, Standard ML, Verilog, Python GUI Library Tkinter, Latex, Markdown
ML And AI	Have done various online courses and projects in Artificial Intelligence & Machine Learning.
Game Development	Cross Platform Game Development with Unity Game Engine
Photo Editing	Photo Editing with Photoshop

Positions of Responsibility

1	Club Head of Institute's Coding Club
2	Class Representative for 2 Semesters

Achievements

Chine Youth Delegation	Selected by the Ministry of Youth Affairs and Sports, Govt. of India among 200 students to represent India as a youth delegate in the "Indian Youth Delegation to China - 2018" (3rd July 2018 - 10th July 2018).
Academic	Highest CGPA yet in my branch.
Competitive Programming	Secured All India Rank 20 in Preliminary ICPC 2018 Secured All India Rank 86 in a contest conducted by Johnson & Johnson

Projects

Sem VI — Database Project — Database

My team created a database with GUI written using python library Tkinter and Database written in SQL (MariaDB) for amazon like marketplace.

Sem VI — Compiler — Compiler

Wrote a compiler to compile Tiger language to MIPS using Standard ML, ML-Lex, ML-YACC. Since repository is private due to academic reasons, email me for an access.

Sem V — Predicting Taxi Travel Time — ML

Analysed various approaches to predict a trip's travel time with their pros and cons, given the partial taxi trajectory of various taxis running in the city of Porto.

Sem IV — Tic Tac Toe Game With AI on FPGA — AI, Verilog, FPGA

Implemented a Tic Tac Toe game between a human player and an AI. The main code is written in Verilog language. The code for the AI part was generated with C++ using concepts of graph theory and dynamic programming.

Sem IV — Surveillance Using Motion Detection — Signals And Systems

Came up with a system capable of recognizing motion and storing the signals after classifying the digital signal as interesting or uninteresting. It takes into consideration practical scenarios such as small noise and ambient lighting.