



# Sourabh

Aggarwal



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## 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

|                         |   |
|-------------------------|---|
| China 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). Received Certificate of Academic Excellence for highest CGPA in my branch |
| Academic                |   |
| Competitive Programming | Secured All India Rank 20 in Preliminary ICPC 2018<br>Secured All India Rank 86 in a contest conducted by Johnson & Johnson   |

## Projects

|        |  |                     |
|--------|--|---------------------|
| Sem VI | Database Project<br>My team created a database with GUI written using python library Tkinter and Database written in SQL (MariaDB) for amazon like marketplace.  | Database            |
| Sem VI | Compiler<br>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.  | Compiler            |
| Sem V  | Predicting Taxi Travel Time<br>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.  | ML                  |
| Sem IV | Tic Tac Toe Game With AI on FPGA<br>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.                         | AI, Verilog, FPGA   |
| Sem IV | Surveillance Using Motion Detection<br>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. | Signals And Systems |