



# Sourabh Aggarwal



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## Education

B. Tech. CSE IIT Palakkad | 2020 |  
CGPA: 9.71/10 (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".

## Work Experience

Internship At Avi Networks Upgraded logging packages in Go ( $\times 5$  speedup) and did automation using Terraform and Ansible, see this PR

## 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, Go  
**Web Development** Markdown, HTML, JS(X), React, CSS  
**ML And AI** Have done various online courses and projects in Artificial Intelligence & Machine Learning  
**DevOps** Work experience in Terraform and Ansible  
**Mobile App Development** Cross platform mobile development using Flutter

## 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).  
**Academic** Received Certificate of Academic Excellence for highest CGPA 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

B. Tech Project	Compiler	Compiler
	Compiler to compile Tiger language to RISC V using Standard ML, ML-Lex, ML-YACC. Visit my project site: <a href="http://tigercompiler.ml">tigercompiler.ml</a> for more information	
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 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.	