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: tigercompiler.ml 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.