

Name: Rahul Yadav

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EDUCATION

Year	Degree	Institute	% / GPA
2013-2014	10 th Grade	Army Public School, Bhopal	10 CGPA
2015-2016	12 th Grade	Army Public School, Bhopal	95.2%
2016-2020 (Present)	B.E. in Computer Engineering	Army Institute of Technology, Pune	8.09 SGPA (Sem. 5–6) 9.02 SGPA (Avg. (Sem. 1–6))

EXPERIENCE

Software Engineering Intern

Tarana Wireless Inc.

June 2019 - July 2021

- Added multiple utility features to the services running on Tarana Devices. Used C++ for doing the same.
- Re-wrote and modified topological sort for the dependency graph between modules for ordering startup.
- Implemented a data structure for dynamically changing order of rows while populating a statistics table.
- Redesigned all the statistics tables and made them use Libfort library for better readability.
- Learnt: **GDB, Bazel, gTest, gMock, OOPs(C++)**, networking basics (**TCP/IP**) and working on **Linux** based OS.

TECHNICAL EXPERIENCE

PROJECTS

- Bloom Filters:** Implemented a probabilistic data structure for simulating the application of checking if a username is taken or not. Language used: **C++**. *Oct 2018 – May 2021*
- Chess AI:** Implemented a chess player using **Artificial Intelligence** (Min-Max algorithm and alpha beta pruning). Language used: **C++**. Library used for visual graphics: **OpenGL**. *Dec 2013 – Aug 2018*
- Car Dodging Game:** A single player car dodging game for Android. Game Engine: **Unity 3D**.

KNOWLEDGE OF ADVANCE DATA STRUCTURES AND ALGORITHMS

- Data Structures:** Fenwick Tree, DSU, Tries, Sparse Table, BST, AVL Tree, Segment Tree, Merge Sort Tree etc.
- Algorithms:** Searching, Sorting, Dijkstra, Prims, Kruskal, Strongly Connected Components, Sqrt – Decomposition, Heavy Light Decomposition, Mo's Algorithm, Cycle detection, Bridge Finding, Topological Sorting, RMQ, KMP, Rolling Hash, Centroid Decomposition, Binary Lifting, Aho-Corasick etc.

HONORS AND ACHIEVEMENTS

- Max. Rating of 1912(**Candidate Master**) on **Codeforces**. Username: **smokescreen**.
- 1st Candidate Master from Pune. Amongst top 3 rated competitive coders of the city.
- Secured **5th** position in **ACM-ICPC '20** at IIT Pune-Gwalior regionals and **23rd** in **ACM-ICPC '19** at IIT Kharagpur regionals. Secured **28th** position in **ACM-ICPC Asia West Continent Finals '20**.
- Ranked **75th(Round H)** and **231st(Round E)** in **Google Kickstart**. Qualified **Facebook Hacker Cup '19** Round 1.
- Secured 1st and 2nd positions in a lot of events (Codeder, Codifica, Pulzion, Neo, Mindspark, etc) across all top engineering colleges of Pune, like COEP, PICT, AIT, Cummins, MIT, DY Patil consistently for 3 years.
- Won Cummins hackathon sponsored and judged by IBM.

LEADERSHIP AND EXPERIENCE

Dec 2013 – April 2021

Was the head of the Competitive Coding Cell of AIT, Pune (2018-19) and have helped in organizing, testing and preparing inter and intra college coding events.

- Take monthly classes of third year, second year and first year students on Data Structures, Algorithms and Problem Solving. Share tricks and motivate them to do better. *Dec 2013 – Dec 2021*

SKILLS AND TECHNOLOGIES

- Languages: **C++, C, Java (Basics), MySQL (Basics)**
- Subjects: Data Structures, Algorithms, Operating Systems, DBMS, Computer Networks and OOPs.
- Worked on Linux, Windows and use Git for Version Control.

INTERESTS

- Solving problems. Learning new Data Structures and Algorithms. Competitive Programming.

- Others: Sketching, solving Sudoku.