

Rahul Anand

COMPUTER ENGINEERING MAJOR · THAPAR UNIVERSITY

☎ (+91) 814-692-1067 | ✉ rahulanand16nov@gmail.com | 🏠 anandrahul.me | 📱 rahulanand16nov | 🌐 rahul-anand-nov

Skills

Languages	C++/C · JavaScript · Python · HTML/CSS · SQL · GraphQL · LaTeX
Frameworks	Node.js · Express.js · jQuery · Bootstrap · Socket.IO · MongoDB
Toolkit	Git · Vim · Docker · Kubernetes · Bash · VSCode
Interests	Infrastructure Engineering · Backend Engineering · Distributed Systems

Projects

PathAlgo

PATHFINDING ALGORITHMS VISUALIZATION

Jul. 2019 - Present

- Developed a pathfinding algorithms visualizer using plain vanilla JavaScript.
- Supports algorithms like A*(A-star), Breadth-First-Search, Depth-First-Search, Greedy for pathfinding to reach the target.
- Implemented Prim's, Eller, Wilson and Kruskal's algorithms for maze generation.

LetsWatch

YOUTUBE VIDEOS SYNCHRONIZATION

Apr. 2019 - Jun. 2019

- Built a web app for watching YouTube videos in Synchronization with any number of people using Node.JS.
- Implemented functionalities like changing url, private rooms and chat window etc.
- Used Socket.IO for web socket communication, YouTube API for player control and Heroku for hosting.

Shorttty

URL SHORTENER

Jan. 2019 - Mar. 2019

- Used Node.JS and Express.JS to create an open source URL shortener app like tinyurl.
- Implemented RESTful APIs to expose functionalities like create, delete URLs/API developer keys etc.
- Used nanoid for 128-bit hash value generation, MongoDB for database and Heroku for hosting.

Opticalflow

OPTICAL FLOW ANALYSIS

Oct 2018 - Dec. 2018

- Used optical flow analysis and OpenCV to convert video into motion paths.
- Working with various frames per second of the same sample video.
- Implemented Farneback and Lucas Kanade optical flow algorithms for conversion in C++.

Education

Thapar University

Punjab, India

B.E. IN COMPUTER ENGINEERING

Aug. 2018 - Present

- Relevant Courses: Data Structure and Algorithms, Operating Systems, Computer Networks, Calculus, Discrete Mathematical Structures, Probability & Statistics
- Cumulative Grade Points Average (2 semesters): 7.0/10
- Expected Graduation: April 2022

Apeejay School

Punjab, India

PHYSICS, CHEMISTRY, MATHS, COMPUTER SCIENCE

Aug. 2016 - Aug. 2018

- 12th Grade Percentile (CBSE): 83.4%
- 10th Grade Cumulative Grade Points Average (CBSE): 9.8/10

Honors & Awards

INTERNATIONAL

- | | | |
|------|--|-------------------|
| 2016 | Honorable Mention , NASA Ames Space Settlement Design Contest | California, U.S.A |
| 2015 | Honorable Mention , NASA Ames Space Settlement Design Contest | California, U.S.A |

DOMESTIC

- | | | |
|------|---|-------|
| 2018 | Top 2 % , Joint Entrance Examination Mains (Taken by 1.5 million candidates) | India |
|------|---|-------|