

RISHABH MALHOTRA

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Education

Thapar Institute of Engineering And Technology

B.E. Computer Engineering - Major Elective - Graph Theory

May. 2018 – May 2022

Patiala, Punjab

Projects

Caucus : A real time collaborative editor | *Typescript, React, NodeJS, WebRTC, PostgreSQL*

May'21

- [Caucus](#) is a real-time collaborative editor with an embedded compiler for remote code execution that helps students practice for online coding interviews.
- Accomplished real-time collaboration using WebRTC and CRDT (*Conflict free Replicated Data Type*) and chat functionality with the help of web-sockets.
- Implemented user authorization using OAuth 2.0 protocol with passport library in NodeJS.
- Uses CRDT's for conflict resolution while merging two documents while two people are collaborating.
- Incorporated remote code execution, enabling users to compile & run code in C++, Java, Python, JavaScript, Golang & Rust.
- It has gathered over **160 stars** on [GitHub](#) with over **1000** registered users, and **40000+** website visits.

Code Forces Diary | *React, Redux, Typescript*

Nov'20

- Developed a [website](#) that visualizes user data from codeforces public API into charts and graphs.
- Built using React and used victory Charts and D3.js for visualization.
- It has gathered over **60 stars** on [GitHub](#) with over **8000+** website visits.

Leetcode REST API | *Selenium, Cheerio, NodeJS, Sqlite*

Mar'21

- Developed a public REST API in NodeJS which sends Leetcode question data in form of JSON.
- Used selenium and cheerio to scrape all the free-questions from the Leetcode website.
- It can filter questions based on tags, difficulty and companies. Uses Sqlite to store and Knex.js as query-builder to retrieve the list of questions.

Data Structure Repository | *C++, Golang*

Aug'19 – Present

- Documented a list of all **500+** questions solved on Leetcode, codeforces, GeeksForGeeks.
- Leetcode Profile : [leetcode/Rishabh-malhotraa](#)
- GeeksForGeeks Profile : [geeksforgeeks/Rishabh-malhotraa](#)

Experience

Genpact

Aug'20 – Oct'20

Full Stack Developer Intern

Remote

- Designed and developed [custom form](#) to streamline the process of entering data that needs to be analyzed.
- Developed a backend in python to handle file upload and normalize the data and send it to the spring microservice.
- Built the frontend using React JS Typescript and Material UI and designed mockups in Figma.

Open Source

Mar'20 – Present

Navidrome | *Golang, React, Sqlite*

- Collaborated with the maintainer of the project to add features and remove bugs present in Navidrome, which is written in React and GoLang.
- List of [Pull Request](#) and [Issues](#) raised on GitHub for Navidrome.

Joplin | *Electron, React, Typescript, Sqlite, NodeJS*

- Worked on the open-source note-taking app [Joplin](#), written in electronJS, also made a [re-imagined inline markdown/WYSIWYG](#) editor for Joplin using React.
- Improved documentation, and gained first-hand software development experience from the maintainers of the repository.

Technical Skills

Languages: JavaScript, TypeScript, GoLang, HTML/CSS, C++, SQL, Python, LaTeX

Developer Tools: VS Code, Vim, Git, GitHub, Figma

Technologies/Frameworks: React, Express, Docker, Azure, Nginx, Websockets, WebRTC