

Ayan Choudhary

PROGRAMMER · SOFTWARE DEVELOPER · CLOUD ENTHUSIAST

F-74, Govind Bhawan, IIT Roorkee, Roorkee-247667, Uttarakhand, India

☎ (+91) 8827254838 | ✉ ayanchoudhary1025@gmail.com | 🏠 ayanchoudhary.github.io | 📱 [AyanChoudhary](https://www.linkedin.com/company/ayanchoudhary) | 🌐 [AyanChoudhary](https://www.linkedin.com/company/ayanchoudhary)

Education

Indian Institute of Technology Roorkee

Roorkee, India

B.TECH IN ELECTRICAL ENGINEERING

June. 2018 - PRESENT

- Cumulative Grade Point Average, CGPA: 8.800/10

Narayana Junior College (TSBIE)

Hyderabad, India

INTERMEDIATE PUBLIC EXAMINATION, 12TH

June. 2016 - March. 2018

- Percentage of Marks Scored, 96%

O.P.Jindal School, Urjanagar (CBSE)

Raigarh, India

SECONDARY SCHOOL EXAMINATION, 10TH

June. 2015 - March 2016

- Cumulative Grade Point Average, CGPA: 10/10

Extracurricular Activity

SDSLabs

IIT Roorkee

EXECUTIVE MEMBER

Jan. 2019 - PRESENT

- Regularly conducted hackathons, public lectures, and competitions to foster the technical culture on the campus.
- We build applications, conduct hackathons and Winter of Code for improving the coding culture in IIT Roorkee.
- Mentored freshmen students in their projects for the Winter of Code program and also helped improve the technical culture in the campus.

SPARK Web Development

IIT Roorkee

DEVELOPER

June. 2020 - PRESENT

- SPARK Web Development is the group which works to develop and maintain the website for SPARK which is the summer internship programme of IIT Roorkee.
- Made performance improvements and configured site analytics along with cloud setup of the present website.
- Responsible for maintaining current application and server management.

CC Search

Creative Commons

CORE-COMMITTER

June. 2020 - PRESENT

- Conducted accessibility audit tests and improvements in cc-search.
- Internationalised the cc-search website and made feature improvements.
- Developed some of the important features to improve the website functionality.

Vocabulary

Creative Commons

MEMBER

Aug. 2019 - PRESENT

- Participated in making appropriate design changes to make components more accessible.
- Worked in assessing the changes in components to support internationalization and accessibility changes.

The Debating Society, IIT Roorkee

IIT Roorkee

MEMBER

Aug. 2018 - PRESENT

- Took part in various inter-varsity debate tournaments across the country in Delhi, Bombay and Bengaluru circuits
- Conducted workshops and debate tournaments in the campus to promote the culture of debating.
- Represented in multiple debate tournaments including interIIT debate competition held during the interIIT cultural meet.

Achievements

2015	First Runner Up , 4th INSPIRE NLEPC, Regional Award(Central Region)	New Delhi
2016	Invited , Sakura Student Exchange Programme	Japan
2016	Scholar , KVPY, SA	Hyderabad
2016	Winner , Bal Shree Award	New Delhi
2017	Scholar , KVPY, SX	Hyderabad
2017	Invited , Vijyoshi Science Camp	IISER Kolkata
2019	Winner , Microsoft Code.Fun.Do++ OnCampus Round	IIT Roorkee

Experience

Accessibility Improvements and Internationalization

Work from Home

GOOGLE SUMMER OF CODE AT CREATIVE COMMONS

June. 2020 - Aug. 2020

- Conducted accessibility and usability audits for the cc search website using various tools such as pa11y, lighthouse, and accessibility insights
- Conducted tab index audits using accessibility insights tab-index audit tools.
- Made accessibility improvements(which also involved redesigning certain aspects and a changed configuration for modals and other interactive elements) to CC Search.
- Internationalized the CC search website and setup CI workflow for future accessibility audits before integration.
- Automated the internationalization process by setting up automation tasks with Github actions and Transifex API.

Development of Virtual Expo Infrastructure

Work from Home

PROJECT ENGINEERING INTERN AT EXIKONNECT

July. 2020 - September. 2020

- Created a virtual exhibition system in which people can visit an online expo without being there themselves.
- Managed cloud systems for the software and handled project management along with deployment on gamelift instance.
- Setup multiplayer interaction functionalities and worked on the world design and architecture.
- Contributed in key measures to automate world generation and quick deployment of the expo.

Projects

StudyPortal

IIT Roorkee

SDSLABS

Mar. 2019

- Developed the ReactJs frontend for the web-application to facilitate resource exchange.
- Implemented the django based backend and the google drive integrations to develop the file storage architecture.
- Integrated a docker-based environment for unit-testing and proper service management for the websocket connections and the redis and elastic search instances.

InstaVote

IIT Roorkee

MICROSOFT CODE.FUN.DO++ SUBMISSION , ETHEREUM DAPP

Aug. 2019

- InstaVote is a blockchain-based electronic voting system built using solidity.
- Developed a central Node.Js server for storing important admin related information and to maintain a single source of truth for highly confidential data.
- Developed ReactJs based frontend and configured central server for a highly secure facial recognition login system powered by MS azure face API.
- Developed and integrated voting systems that run on the solidity based blockchain system.
- This application has an independant admin panel to supervise all the election process and which interacts simultaneously with the blockchain and the central servers.
- Source code available at <https://github.com/sudo-rm-force/InstaVote>.

Spark Website

IIT Roorkee

SPARK, IIT ROORKEE

Aug. 2019

- Spark, IIT Roorkee is the summer internship program of IIT Roorkee.
- The web DApp runs a central Node.Js server for storing important admin related information while the decentralised blockchain server houses the user functionalities.
- Developed the website consisting of a ReactJS based frontend and a NodeJS backend with Mongo as the database.
- Implemented google oauth support, developed the underlying cloud architecture and setup the website analytics and other important functional features.

Gaspar

IIT Roorkee

SDSLABS

March, 2019

- Gaspar is a Platform as a Service (PaaS) written in Golang that can deploy and scale web applications based on Python, PHP, Node.js, Golang, Ruby with MySQL, MongoDB, PostgreSQL, Redis as database engines.
- It is engineered on microservices architecture and uses Docker for the containerization of the applications and databases. The microservices interact with each other through gRPC
- Developed the website consisting of a ReactJS based frontend and a NodeJS backend with Mongo as the database.
- Gaspar is packaged into a single binary (including the frontend) and can be setup with just two commands

Quizio

IIT Roorkee

SDSLABS

March, 2019

- Quizio is an online test platform created with the vision of conducting safe unsupervised tests.
- The platform allows real-time monitoring and logs any instances of tab-switching, escape from full screen test mode or any other malpractices and allows for immediate participant expulsion.
- Integrated redis-caching for the routes to improve real-time network performance.

Zeronet

IIT Roorkee

MICROSOFT ENGAGE PROGRAM

July, 2020

- Zeronet is a tic-tac-toe game with an AI-controlled opponent. The tech consists of a VueJs based frontend and go based backend.
- Each game has its own session to facilitate the parallelization of the games without affecting performance.
- Developed the AI algorithm and implemented the complete backend functionalities in Go.
- Setup azure pipelines for CI and CD to ensure hassle free deployments.

zap-db

IIT Roorkee

SDSLABS

Feb. 2020

- zap-db is an easy to use JSON database written with ease of setup and memory management of slack-bots in mind.
- It is written in TypeScript and follows a session-token based architecture to maintain data.
- Implemented store, database and middleware functionalities for the db and corresponding APIs.

ReProX

IIT Roorkee

GLOBAL GAME JAM, IIT ROORKEE

Feb. 2020

- ReproX is a completely indie VR first-person shooter and uses UE4 as the engine.
- Generated world and developed character mechanics and also helped design game flow.

Skills

Programming	C/C++, Java, Go, Rust, Python, Javascript, Solidity, Coffeescript, HTML/CSS, Ruby on Rails, Handlebars
Web	ReactJs, VueJs, Express.js with Node.js, Toro with PHP, Flask and Django with Python
Native	React-Native, Android
Database and Storage	MongoDB, PostgreSQL, SQL, Firebase
DevOps	Kubernetes, Azure Ethereum Workbench, Docker, Azure, AWS
Developer Tools	Git, Android Studio, Vim, VSCode, Sublime, Robo3t, Nodemon, Postman, WebStorm
Designer Tools	Figma