

SHUBHAM SINGH

Junior Undergraduate
Mathematics and Scientific Computing
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EDUCATIONAL QUALIFICATIONS

| Year | Degree | Institution(Board) | CGPA/% |
|-----------------------|------------|--|-----------|
| Jul'17 – May'21(exp.) | B.S., MTH | Indian Institute of Technology, Kanpur | 8.6/10.0 |
| 2017 | CBSE – XII | J.T. Golden Jubilee School, Allahabad | 94.4% |
| 2015 | CBSE – X | J.T. Golden Jubilee School, Allahabad | 10.0/10.0 |

WORK EXPERIENCE

Google Summer of Code

Student Developer, Rocket.chat

Summer 2019

- Worked on two Open Source projects, Ghost(publishing platform) and Rocket.chat.
- Modified Ghost code to allow easy integration with Rocket.chat.
- Allows Rocket.Chat user to create account on Ghost with a simple redirect, and utilize all the features provided by Ghost.
- Implemented webhooks to keep both application database in sync.
- Added Ghost in Rocket.chat as a social feature for Rocket.chat users.

C3i Center, IIT Kanpur

Intern, Under Prof. Sandeep Shukla

Kanpur, India
May. 2019 - July. 2019

- Topic: Dynamic verifiable frequency based billing system.
- Implemented a frequency based pricing system for two-way distribution model between consumers and distributors.
- Implemented a private blockchain network using hyperledger fabric framework.
- Created a react based web application to simulate a day events in network.
- Worked on hyperledger explorer to monitor the changes in the network.

Leena AI

Intern, App Developer

Gurgaon, India

Dec. 2018

- Worked on a scalable cross-platform application, built using React Native framework.
- Built a Chat app from scratch where user can chat with multiple bots assisting them with their HR, IT, and other employee related queries.
- Integrated web-socket in the app for two-way communication between client and server.
- Added push notification service in app for notifying user about the updates on his/her query.

New York Office, IIT Kanpur

Intern, under Prof. Manindra Agarwal

Kanpur, India
May. 2018 - July. 2018

- Worked on a scalable android application, designed in MVP architecture.
- Integrated editor in app to allow rich text editing, in different source type- Markdown, HTML and WYSIWYG.
- Created a detail fragment where user data can seen in brief, and can be redirected to user's profile.
- Improved UI/UX of the app by implementing features associated with menus, viewpagers, card views, preference layouts etc. adhering to Google's Material Design guidelines.
- Implemented linting and unit testing as part of development workflow.

SCHOLASTIC ACHIEVEMENTS

- Academic Excellence Award, Exceptional Performance in Freshmen Year
- All India Rank 1732, Joint Entrance Exam Advanced
- Science Talent Search, Secured 2nd position in Mathematics

EXTRACURRICULAR

Code.Fun.Do++

Hackathon

Microsoft India

Sept'2018

- Developed an android app which helps to connect victims of any disaster event, with Disaster relief agencies.
- Used Firebase tools for creating serverless APIs and database.
- Used Firebase notification service for notification.

COURSE PROJECTS

Mozart Interpreter

Principles of Programming Language

Prof. Satyadev Nandakumar

Aug'19 - Nov'19

- A declarative-concurrent interpreter for Oz based on the Kernel language.
- Management of Semantic Stack, Single Assignment Store, Environment, Closures etc.
- Source code can be found here: Mozart-Interpreter

POSITIONS OF RESPONSIBILITY

Web Executive

Stamatics

IIT Kanpur

2018-19

- Maintain the Website of Stamatics group, Dept. of Mathematics and Statistics.

Academic Mentor

Counselling Service

IIT Kanpur

2018-19

- Academic mentor to students of the freshman year, helping and guiding them in their courses.

RELEVANT COURSES

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|--|-------------------------------------|
| Introduction to Programming(A*) | Bayesian Analysis(i) |
| AI techniques in Data Mining(i) | Probability & Statistics |
| Data Structures and Algorithms | Computer Architecture(i) |
| Principles of Database Systems(i) | Principles of Programming-Languages |
| Numerical Methods & Scientific-Computing(A*) | |

A*: Grade for exceptional performance i: Ongoing courses

MISCELLANEOUS

- Contribute to Open Source projects like Rocket.chat
- Started an Open Source project for GSoC organizations to keep track of student's contribution for better selection criterion.
- Completed Linux from Scratch project, which guides to build our own custom Linux system.