

SOMYA GUPTA

Junior Undergraduate, Mathematics and Scientific Computing
Indian Institute of Technology, Kanpur

✉ tosoyagupta@gmail.com 📞 +91 98116 22831

✉ sohyagupta20@iitk.ac.in in sohyagupta18

🌐 https://sohyagupta.me 🌐 sohyagupta18

EDUCATIONAL QUALIFICATIONS

Year	Degree	Institution	CPI/%
2024*	Mathematics and Scientific Computing	Indian Institute of Technology, Kanpur	8.7/10.0
2020	CBSE - Grade XII	Delhi Public School, New Delhi	97.2%
2018	CBSE - Grade X	Delhi Public School, New Delhi	98.4%

* : Expected year of graduation

WORK EXPERIENCE

Lead Developer

Students' Placement Office, IIT Kanpur | [Go](#) [ORM](#) [JWT](#) [SQL](#) [S3](#) [Cloudfront](#) [Docker](#)

April'22 - July'22

ras-backend 🌐

- Built the **backend** for the new **Recruitment Automation Portal** for use by **1700+** students and **500+** companies
- Explored Content delivery through **Cloudfront** and **AWS S3 Buckets**, compared with in-house CDN built in Go
- Implemented a **microservices based architecture** in Go, with around **150** privilege-based context model endpoints
- Delivered enhanced **scaling**, 60% faster response and **optimal database queries** using indexes and foreign keys
- Incorporated role-based **user authentication**, session validation using **JWT**, async mailing, and logging for alerts

Python Developer, Summer Intern

To The New, Noida | [Python](#) [RabbitMQ](#) [Minio](#) [PostgreSQL](#) [Storage](#)

May'22 - Present

- Worked on solving issues related to reading information from **storage server** for our client, beneficial for long-term
- Used **RabbitMQ** to queue messages and **python** libraries to read files from local S3 bucket, integrated **PostgreSQL**

PROJECTS

IITK Coin

SnT Council Project, IITK | [React Native](#) [TypeScript](#) [Expo](#)

Sept'21 - Dec'21

iitk-coin-native-app 🌐

- A centralised reward based **pseudo-coin system** for use by 5000+ IITK students for storage and exchange of currency
- Built a user-friendly **mobile application**, implemented modular code in **React Native** with **TypeScript** and Expo
- **Developed** custom components such as **bottomsheet**, card-based designs and forms based on UI/UX made in Figma
- Integrated the app with backend using **axios**, secure-store and **redux**, allowing multiple states and app navigation

Game of Blocks

Programming Club, Summer Project | [Solidity](#) [JavaScript](#) [NFT](#) [Web3](#) [Ethereum](#)

May'21 - July'21

Game-of-Blocks 🌐

- Explored **blockchains**, focusing on **Ethereum**, various consensus mechanisms, **game theory** and its applications
- Implemented and deployed **smart contracts** related to different voting methods and school choice systems in **Solidity**
- Made a webpage using **web3** and Moralis, it shows the transactions and metadata of NFTs on the Ethereum blockchain

POSITION OF RESPONSIBILITIES

Head, Web, Media and Design

Inter IIT Techmeet 11.0

- Responsible for managing the website for the upcoming **Inter IIT** which will see a participation of 22 IITs and an **involvement of about 5k students** across the country, proposing and carrying out initiatives in the same domain

Manager, Alumni Relations

Outreach Cell '22-'23

- Strengthening **Student-Alumni relations** by planning events like Mock-en-Joy and Core talks for junior batch of **1200 students**, interviewing IITK alums about their life experiences, coordinating with DoRA office and IITKDF

SKILLS

Programming: C, C++, Python, Go, Solidity

Web: HTML, CSS, JavaScript, TypeScript, React

Utilities: Git, Nginx, Docker, PostgreSQL, Insomnia, $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$

RELEVANT COURSES

Fundamentals of Computing

Data Structures and Algorithms

ODE

Linear Algebra

Set Theory and Mathematical Logic

Probability and Statistics

Analysis

Abstract Algebra

EXTRACURRICULAR

- One of the two **co-founders** of a digital marketing agency, '*The Yellow Cactus*', which promotes the growth of small businesses, provided them with web development services, social media post designing and management
- Received **Academic Excellence Award** for **two consecutive years** for exemplary academic performance in IITK
- Mentored 5 freshmen in adjusting to institute environment on an academic and emotional front, as a **student guide**
- Organised **PenPal Initiative** as Batch senator to increase interaction among peers, participation being **600** students
- **Stood 3rd** among 100+ teams in Takneek'20 by SnT Council, **Stood 2nd** among 50+ teams in GnS Scavenger Hunt