Soham Sen

Third Year Undergraduate Student Department of Electrical Engineering Indian Institute of Technology Kharagpur



Academic Qualifications

Year	Degree/Certificate	Institute	CGPA/%
2020 - 2024	Bachelors of Technology in Instrumentation	Indian Institute of Technology, Kharagpur	8.89/10
(Exp.)	Engineering		
2020	Grade XII (All India Senior School	Birla High School, Kolkata	94.0%
	Certificate Examination)		
2018	Grade X (All India Secondary School	Birla High School, Kolkata	94.0%
	Examination)		

Internships

LimeChat — Incoming Software Intern

May 2023 - July 2023 (Exp.)

• Got selected for the internship via the on-campus internship drive at the Indian Institute of Technology, Kharagpur.

FounderBlocks — Software Development Engineer

March 2022 - Present

- Involved in multiple different projects and improved the existing codebase or created one in Django, React, Angular and Flutter.
- Worked on the optimization of the code, adding new features to the applications and removing existing high-priority bugs.

Summer of Nix 2022 — Participant

June 2022 - September 2022

- Participating in Summer of Nix, an 8-weeks long event which involves contributing to the NixOS open source project for NGI0 and is funded by the European Commission.
- Packaged different software using Nix and published to the NixOS software repository.

Aftershoot Inc. — Fullstack Intern

June 2021 - July 2022

- Rewrote existing NodeJS application backend into Rust, which led to a 10x improvement in speed and heavily reduced memory usage.
- Implemented serverless functions, CI/CD and data pipelines in AWS and GCP which holds all the server-side functionality of the application, and makes it auto-scale with the number of users. Rewrote the account website in React, which led to a 4x speed improvement and quick first-time load of the site.

Projects

- YTSwag: Created the YTSwag project to improve YouTube Music, adding support for lyrics, custom themes and various other features.
- Pinocchio Discord Bot: Created a Discord bot in Python capable of interacting with users with fun games and utilities, which is in over 5,800 groups and has an estimated 600K+ users. Written using asynchronous logic and dockerized to scale horizontally with increasing number of users.
- Nix Packages: Created and submitted multiple Pull Requests (which were merged) to port various software (such as ExpressVPN and DragonflyDB) to the NixOS Linux distribution. Working on adding more software to improve the experience of the distribution.

Awards and Honors

InterIIT Tech Meet 10.0 — Solo Gold

March 2022 - May 2022

- Won solo gold in the high preparation event of the InterIIT Tech Meet, held between the IITs, the top engineering colleges of India. The event involved deciding on a project related to IoT and then creating a prototype and theoretical model of it.
- Worked on the cloud integration of the IoT project and the communication of the device with the internet.

Google Code-In 2016 — Grand Prize Winner

Novemeber 2016 - January 2017

- Won Google Code-in, a coding contest organized by Google globally to promote open source software. Won a trip to the Google Headquarters in Mountain View, California.
- Worked on 2 android applications, PowerUp and Malaria and a Django-based web app, volunteer management platform spanning over bug fixing, feature implementation and documentation tasks.

Positions of Responsibility

Executive — Kharagpur Open Source Society

June 2021 - Present

- Conducted training workshops on topics such as Python, Git, Linux and Docker.
- Helped organize Kharagpur Winter of Code, inspired by Google Summer of Code, which had over 50 projects and 1000 students.

Skills

- $\bullet \ \mathbf{Languages} \text{: } \mathrm{Python, } \mathrm{Go, } \mathrm{TypeScript/JavaScript, } \mathrm{Rust, } \mathrm{C/C++, } \mathrm{PHP, } \mathrm{Verilog, } \mathrm{Bash, } \mathrm{MATLAB} \\$
- Frameworks and Tools: Django, React, Laravel, Symfony, Gin, Qt, Unity, Git, Intel Quartus
- Miscellaneous: MySQL, PostgreSQL, Amazon Web Services, Google Cloud Platform, Linux, LATEX