Pritam Mukherjee

Pragmatic software engineering student with experience in leadership roles. Adept at architecting solutions to business-critical problems and technical challenges with a constant drive for efficiency and optimization. All-in-all, I am a curious student of engineering, business, and life; and an engineer by heart.

DL 55, DL Block, Sector 2 Bidhannagar, WB, 700091

+91 8583830944

mukherjeepritam02@gmail.com

LinkedIn: <u>Pritam Mukherjee</u>
Github: <u>@mukherjeepritam02</u>

PROJECTS

Samklaang — Intuitive task-delegation and meeting platform for effortless collaboration

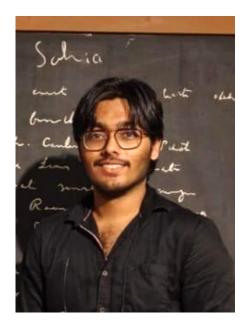
- SIH 2023 national hackathon winning project
- Lets organizations create smart teams and facilitate collaboration out of the box.
- Industry Standard Video, and Audio conferencing solution, with hundreds of participants facilitated by a powerful SFU server.
- Encrypted messaging and media communications.
- Personal, and organization-wide task delegation wizard.
 Effortless HR management.
- Google calendar integration.
- Source quality recorded video playback, facilitated by background workers uploading recorded camera media post-meeting.
- Meeting summaries and actionables facilitated by Generative AI.

<u>Helmdall</u> — Large-scale cybersecurity audit tool for organizations

- KAVACH 2023 national cybersecurity hackathon winning project
- Lets the sysadmins remotely run security audits across the network in client nodes securely.
- Accompanied with a **plugin architecture** for extreme extensibility for organizations who need bespoke features.
- Live audit statuses with log reporting.
- Live CVE vulnerability reporting.
- CIS Benchmarking.
- Short, concise, informative, and easy-to-understand PDF reports
- AI summary of reports for those in non-technical fields.

Shopydoo — Marketplace and last-mile delivery application, that supports nearby small businesses

- Large-scale system made with Flutter (for user applications) and Python FastAPI (for backend).
- Unique product recommendations to each end user.
- Push notifications to the seller dashboard querying about the



SKILLS

Flutter, Next.js, Golang,
JavaScript/TypeScript, Java,
C/C++, Python, Rust, Electron.js,
WebRTC, DevOps, Testing,
Software Design Principles,
UI/UX, Design, Product
management, leadership,
communication, teaching,
motivating

AWARDS

KAVACH 2023 National Cybersecurity Hackathon: Co-lead, motivated, and driven the team to win the hackathon. Engineered the backend systems

- availability of the required product.
- Finds the nearest sellers and delivery partners using their
 Geohash signatures.
- Supports local businesses and sellers who might have yet to get an extensive market reach.

ResearchBook —A social media platform for Articles and Blogs

- Made using **Next.js** and **Firebase**.
- Personalized recommendations to each user.
- Ability to set user preferences to set "preferred theme".
- Page themes, set by authors.
- Community upvoting/downvoting and peer-reviewing features.
- Commenting.

Smart India Hackathon Winner: Co-lead, motivated, and driven the team to win the hackathon. Engineered the desktop application from scratch.

NSTSE Olympiad: Secured rank of 2 in the district for an inter-school science olympiad

EXPERIENCE

Samklaang, India — Co-lead, Engineer — React, Electron.js, WebRTC, Encryption, Software design patterns

DEC 2023 - PRESENT

- Co-led the team to win the **Smart India Hackathon 2023**.
- Managed and led a team of front-end developers.
- Ideated designs for meeting rooms and chat. Emphasized intuitiveness and accessibility for use by a wide range of people.
- Made efficient API, and background workers to work seamlessly with the API servers.
- Worked with CI/CD principles. Managed DevOps.
- Used electron.js to create a desktop application of an app created using React, styled using TailwindCSS.
- Made sure Telemetry and data integrity are maintained occasionally to ensure safety and reliability.
- Used Testing principles to ensure the proper functioning of the project.

Helmdall, India — *Co-lead*, *Engineer* — Golang, Nuxt.js, MySQL, NodeJS, WebSockets, Complex systems design

JUNE 2023 - PRESENT

- Co-led the team effectively to win the **KAVACH 2023** national cybersecurity hackathon.
- Worked with the frontend team, and the client-side team to create Helmdall.
- Ideated the features and ease of usability of the application by both technically, and non-technically aligned people.
- Created the backend API server using Golang.
- Created the WebSockets servers (capable of holding millions of connections at a time, with minimal compute power) using

Golang.

- Created and Ideated the CVE Checker microservice using Golang. The data is pulled periodically from the NVD CVE Database.
- Created the report generation service using **Node.js**. All microservices interact with each other using **gRPC**

Shopydoo, India — Co-founder, Engineer — Flutter, Next.js, UI/UX, Engineering best practices, Systems design

SEPT 2022 - PRESENT

- Designed and made the front-end application using **Flutter**.
- Ideated and designed the flow of orders and tasks.
- Worked with the backend team to make the app work.
- Worked on the Delivery Partner mobile app using **Flutter**.

EDUCATION

Techno India University, WB, India — *B.Tech*, *CSE (AI)* —8.5+ CGPA

AUGUST 2021 - PRESENT

Team-playing and hardworking engineering student with a passion for creating innovative applications to challenge myself.