Sahil Shubham

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I care a lot about Open Source, writing organized code and knowing what I don't know

Education

Indian Institute of Technology

B. Tech in Metallurgy & Materials Engineering

Kharagpur, India 2019 - 2023

Work Experience

FinsynthAI June 2024 – April 2025

Full Stack Engineer | Graph QL, Node.js, Python, AWS, Terraform, Helm, Argo Workflows

- Second Engineer at FinsynthAI, a startup aiming to accelerate long shot financial research workflows inside of Excel
- Created production infrastructure from scratch, building frontend & CI/CD, while leading customer onboarding
- Engineered Excel Add-in with GraphQL, implementing fault-tolerant IndexedDB storage and data normalization
- $\bullet \ \ \text{Architected} \ \& \ \ \text{managed autoscaled EKS for} \ \ \textbf{10+ services}, \ \text{utilizing Helm templates and modular Terraform configs}$
- Reduced infra cost by 25% by implementing mixed ASGs with arm instances, enabled by native multi-arch builds
- Introduced Argo for Bedrock inference DAGs; cut self-hosted model inference time by 78% via time-sliced GPU

Entrepreneur First

July 2023 - January 2024

Entrepreneur in Residence

- Pursued entrepreneurship full-time as part of Entrepreneur First's Graduate cohort, \$10B total portfolio value
- Worked on LLM evaluation & observability, crafting solutions for real-time quality monitoring for RAG pipelines

Workduck

January 2022 – August 2023

Founding Engineer | React, Zustand, Plate.js, Webpack, Web Workers, Chrome APIs

- Frontend Engineer at Workduck, startup with a vision to create an E2E knowledge management tool for product teams
- Ported desktop features to web/extension (Plate.js), streamlining onboarding and making it the primary product
- Benchmarked browser storage types, ensured data sync across Chrome, localStorage, and IndexedDB via Message API
- Added features like public notes with **read-through cache**, web highlights by **Selection Object serialization**, etc.
- \bullet Reduced extension bundle size by 60% using madge and source-map-explorer for cyclic and peer deps analysis
- Enhanced cross-org sync via S3 snapshots and websockets inside of shared workers to broadcast CRUD events
- Improved DX by setting up changesets, and GitHub actions for yarn lock diffs and deployments to chrome store

Felvin Search

May 2021 – March 2022

Full Stack Developer | React, Redux, styled-components, Node.js, Docker, AWS

- First Engineer at Felvin, a startup aiming to improve search experience through open-source community driven apps
- Developed integrations to give users a singular search through their personal documents for Pocket, Notion and Drive
- Dockerized the codebase to deploy on AWS ECS using GitHub Actions for Continuous Deployment, later moved to EKS
- Developed custom CLI to improve the developer experience and handle custom Webpack bundling for multiple packages
- Maintained the open source repository and conducted hackathons to grow the Discord community to 150+ developers

Open-Source Projects

Sprout | Tauri, Rust, React, TypeScript, SQLite, SQLite-vec

Ongoing

- Built Sprout, a minimal, UX-focused daily note taking app that automatically organizes information as you write
- Implemented asynchronous vector embedding generation and semantic search using SQLite-vec for a powerful search

KGPyaar | React, TypeScript, Sass, Flask, MongoDB

February 2021

- Engineered an E2E encrypted dating platform, publishing white paper that drove 600+ student registrations
- Led community engagement through facebook page, driving 950+ followers and 90 successful matches in 2 weeks

Grameen-Setu | React, TypeScript, Sass

March 2021

- Built Grameen Setu, an e-commerce platform for SMEs and SHGs, delivering a user tested solution in 3 weeks
- Secured gold for Tech Innovation at InterIIT Tech Meet and won Dhaka Regional Summits for Hult Prize 2022

Volunteering & Technical Competitions

Open-Source Involvement

- At MetaKGP, contributed to and promoted multiple projects like ERP Auto-Login and GYFT to improve student life
- At KOSS, helped conduct workshops regarding Git, Vim and Python to spread Open Source culture in IIT Kharagpur
- Organized KWoC, a month long event for students to contribute to Open Source, 1200+ registrations & 750+ PRs
- Revamped student council's website to show events, contacts and conduct elections, resulted in 25k visits in 3 weeks

Inter-IIT Tech

- Won gold in InterIIT Tech 2022 for Saasifi, a graph-based analysis tool for SEC filings, built on top of edgar-crawler
- Won Mercari large-scale system design event at InterIIT Tech 2022 with a scalable hospital management system
- Won InterIIT Tech 2023 gold as the Development Captain, oversaw 200+ interviews and managed 10+ teams