

Education

Indian Institute Of Information Technology

Bachelor of Technology, Computer Science and Engineering

Guwahati, India
Jul 2018 – May 2022

- CGPA: 8.98 (on a scale of 10)

Salt Lake School

Kolkata, India

Completed Grad school in 2016 and High school in 2018,

- Grad score: 96.6 %, High school score: 93.75 %

Experience

Product Engineer @ Greyfinch

, Nov 2023 – Apr 2025 (Remote)

- Collaborated in a 3-person engineering team to overhaul payment infrastructure using **React and Hasura GraphQL**, ensuring zero downtime during migration and **reducing payment provider charges by over 50%** without breaking existing workflows
- Designed and delivered a standalone Pay App with **React frontend and GraphQL backend**, implementing custom **Hasura Actions** for secure login and payment processing, impacting more than **20M+ customers** across orthodontic practices
- Launched the complete Pay App solution from concept to production within 3 months, enabling seamless adoption across 15+ partner clinics and processing **\$10K+ in transactions** through secure payment flows
- Contributed to the migration of legacy calendar modules to modern architecture with **database optimization**, implementing custom **functions and indexes** to improve appointment fetching performance by 2x while ensuring **100% feature parity** with legacy system
- Developed responsive UI components using **FullCalendar library and modern CSS**, implementing pixel-perfect designs from Figma mockups and **enhancing user engagement by 25%** across **100+ clinics** for appointment scheduling and monitoring
- Optimized application-wide search using **GIN indexes and pg_trgm extension**, enabling **faster fuzzy search** capabilities across the entire Greyfinch platform and improving search response times by 60%

Full stack Blockchain developer @ Questbook (YC 21)

, Jan 2022 – May 2023 (Remote)

- Worked on the decentralised grants tool that was used by more than **20000 users**, and had disbursed around **USD 2M to builders**.
- Maintained Solidity smart contracts, Next.JS frontend, and sub-graphs that powered the Dapp through **GraphQL** queries.
- Created the **notification system for the app from scratch**. Designed an **email notification system** leveraging **AWS Simple Email Service**. This system dispatched both event-driven and periodic emails to a roster of recipients, enhancing user engagement and reducing response times on the platform
- Developed a **Telegram bot** for user action notifications. It comprised a **webhook**, where the Telegram server sent new subscription requests and a cron job that sent out periodic notifications based on a **pub-sub architecture**
- Integrated Zapier for clients to set up their own data pipelines. For this, created an API endpoint using the **Serverless architecture**, and used periodic polling of this endpoint to get new data
- **Maintained the custom graph node** that Questbook had for its subgraph on Optimism.
- This helped me acquire experience with **AWS Lambda** while deploying serverless apps, **AWS Elastic Beanstalk** for graph node management, and **AWS CloudWatch** for debugging

Projects

Chatterbugs Web App - Brainy Bug Resources

- Built **full-stack web application** using **Next.js, TypeScript, and Hasura** to complement physical educational card decks, serving **500+ active users** and generating **\$5K+ in revenue** for the client
- Implemented **secure authentication system** with **Firebase Authentication** and custom **JWT claims** via Firebase Cloud Functions, enabling user-specific access through unique 6-digit verification codes linked to physical product purchases
- Integrated **QR code system** allowing instant digital content access from physical cards, reducing user friction by **40%** and improving engagement rates across the platform
- Led complete **technology stack selection and database design**, choosing optimal solutions for performance and scalability: frontend, database, and API architecture
- Created **responsive components** with modern CSS and TypeScript, delivering pixel-perfect UI that improved user experience scores by **35%** across desktop and mobile devices
- Designed **scalable backend architecture** with **GraphQL API**, implementing role-based access control and data validation to ensure secure content delivery
- Developed high-performance **backend services in Rust** using **Axum framework**, achieving **60% better memory efficiency** compared to Node.js alternatives while running on resource-constrained DigitalOcean infrastructure. Followed **Hexagonal architectural pattern** while doing to increase the modularity of the API.
- Implemented **Actions and Event Triggers** within Rust server to extend API functionality, enabling real-time notifications and automated business logic processing
- Automated **CI/CD pipelines** using **GitHub Actions**, implementing database migrations, code testing, and deployment automation that reduced deployment time by **80%** and eliminated manual errors