

Abir Roy

royabirdhn@gmail.com | (+91)-9572188816 | linkedin.com/in/abir-roy-21b3052aa | github.com/roy-abir05

Education

National Institute of Technology Durgapur
B.Tech in Chemical Engineering (CGPA: 7.94/10)

August 2023 – April 2027

Skills

Languages: Java (OOP), C/C++, JavaScript/TypeScript, Python, SQL

Technologies & Tools: Spring Boot, React, Next.js, Node.js, PostgreSQL, Git, Docker, REST APIs

Core Concepts: Data Structures & Algorithms, Systems Design, Low-Latency/High-Throughput, Concurrency

Experience

Contributor at cal.com

Shipped production features for a high-scale scheduling platform used by **200k+ teams**, collaborating with core maintainers to improve system reliability, analytics attribution, and the developer onboarding experience.

- [PR #25638 — Meta Pixel Conversion Events](#) 

- Redesigned client-side tracking via SPA-safe History API listeners to ensure precise conversion attribution.
- Authored high-quality pull requests with Zod schemas and unit tests, cutting duplicate signals by 80%.


- [PR #25499 — Routing Form Redirect Logic](#) 

- Replaced fragile slugification with robust URI encoding, successfully handling complex HTTP request logic.
- Collaborated with reviewers to ensure reliable routing, resolving critical production blockers for clients.

- [PR #24849 — Docker Environment Stability](#) 

- Fixed Docker Compose networking errors, demonstrating the ability to quickly debug unfamiliar systems.
- Restored macOS/Linux consistency, significantly reducing onboarding friction for new contributors.

Contributor at Gemini CLI

- **Core Infrastructure:**  Engineered the update command and an automated sudo fallback mechanism, proactively resolving permission errors with minimal defects.

Projects

InsightSphere

github.com/roy-abir05/InsightSphere 





- Developed a full-stack blog platform using **Spring Boot** and **React**, implementing robust Role-Based Access Control (RBAC) to securely handle user sessions and **HTTP requests**.
- Engineered optimal **PostgreSQL** queries to manage complex data relationships, demonstrating proficiency in relational database concepts and ensuring low-latency responses.

Micromatch: High-Performance Matching Engine

github.com/roy-abir05/Micromatch 

- Engineered a low-latency Limit Order Book in **C++17** with **O(1) cancellation**, demonstrating a strong foundation in complex **systems design** and memory management.
- Built a custom **benchmarking suite** with rigorous testing to stress-test 64-bit integer matching, ensuring high-quality execution and **minimal defects** at 12.3 million orders/sec.

Achievements

- **Olympiads:** [INOI Bronze Medalist \(2023\)](#)  (Top 64 nationally). Qualified via ZIO, proving strong foundational aptitude in **discrete mathematics** and **data structures**.
- **Competitive Programming:** [IICPC CodeFest 2025](#)  (Prelims Rank - 201) | [Meta Hacker Cup](#) (5x Round 2 Qualifier) | [Codeforces Specialist](#)  | [CodeChef 4-Star](#) .

Positions of Responsibility

Senior Coordinator, GNU/Linux Users' Group — Led 10 engineers to **ship user-facing** fest platforms, collaborating with **cross-functional stakeholders**. Enforced code quality by exchanging **technical feedback** through rigorous **code reviews**, and owned **GCP infrastructure** to orchestrate highly available challenge containers.