Anubhab Patnaik

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anubhabr50@gmail.com | linkedin.com/in/anubhabpatnaik | github.com/anubhavpgit | instagram.com/anubhavclicks

EDUCATION

New York University

New York, US

Master of Science in Computer Engineering

Sept 2024 — Expected Dec 2025

Silicon Institute of Technology

Bachelor of Technology in Computer Science & Engineering

Bhubaneswar, IN July 2019 — May 2023

EXPERIENCE

DatingAI

Software Engineer

Bengaluru, IN

Aug 2024 — Sept 2024

- Led infrastructure modernization using Node.js and Next.js, improving API throttling by 15%, reducing service outages by 60%, and enhancing overall engine reliability through cross-team coordination.
- Designed and developed multi-platform integration strategy with Telegram and Discord bots, expanding user reach and increasing total active users by 50% while maintaining consistent user experience.

RadiusAI Bengaluru, IN

Software Engineer

Jan 2024 — Aug 2024

- Designed a Rust/Kafka health monitoring service handling 5000 requests/10s with improved Python-to-Rust perf.
- Led Rust optimization of cart simulator with parallel processing for 10x speed boost and faster checkouts.
- Automated DB operations using AWS Lambda/Prefect with 99% data consistency across distributed systems.
- Developed a native GUI application in Rust that highlights unknown objects during checkout in LCD counter-top POS systems, improving store security.
- Created a real-time analytics dashboard using Gradio to visualize annotation data, reducing labeling inaccuracies by 30% and improving model training.

StackIt (Superjoin)

Bengaluru, IN

Founding Engineer

June 2023 — Dec 2023

- Architected and implemented a resilient microservices ecosystem using Docker, Kubernetes, and GitHub Actions, ensuring 99.9% uptime while integrating Chargebee, Hubspot, and Google Ads to increase user acquisition by 4x.
- Engineered an interactive Data-Preview component in React with advanced filtering, joins, and lookup capabilities, improving data visualization by 40% and reducing import errors by 15%.
- Structured sustainable RAG pipelines using Python, LangChain, and LlamaIndex for natural language to SQL/NoSQL conversion, reducing user churn by over 50% and improving query accuracy by 35%.

Squbix Digital

Bhubaneswar, IN

Software Developer (Blockchain developer)

June 2022 — Dec 2022

• Optimized the DID pallet in Rust & Substrate on Polkadot, implementing efficient on-chain storage patterns that reduced error rates by 30% while migrating the JS SDK to TypeScript to improve type safety.

TECHNICAL SKILLS

Systems Engineering Rust, C/C++ (Systems Programming), Parallel/Distributed Computing **Web & Cloud Technologies** TypeScript/Node.js, React/Next.js, AWS, Docker, Kubernetes, Kafka, MongoDB, PostgreSQL **AI/ML Integration** RAG Pipelines, LangChain, LlamaIndex, Vector Embeddings, Python (Data Processing)

PROJECTS

Docking Compilers - &

C++, Rust, RISC-V

Ferry - A high-performant, optimised **minimal C lang compiler** for RISC-V written in Rust, & **Yatch** - a five-stage, hazard & memory-safe, 32-bit pipelined machine code interpreter for RISC-V with a built-in binary **decoder**. → **Demo**

LIND - Research / Open Source Contribution - &

Rust, WASM

A single-process sandbox to securely isolate program execution with fine-grained resource control to prevent system failures **DOUGH - O** Rust, Bash

A high-performance CLI tool for rendering markdown presentations in the terminal with custom syntax highlighting \rightarrow **Demo BEE** - \mathscr{P} Python, BitTorrent

A BitTorrent client with an item-based collaborative <u>recommendation system</u> and a <u>rating prediction system</u> with 95% acc

RESOC - **\nabla

React, Firebase

A college resource-sharing platform with taskboard & community chat, 200+ active users within the first 3 months. **Live°**Fireside - • • Gun|S, Svelte, Rust, Firebase

A decentralized chat app enabling low-latency, secure, and ephemeral messaging service. Liveº

VOLUNTEER EXPERIENCE

Member, Google Developer Student club (GDSC), New York University, Tandon. 2024—2025

Member Secure Systems Lab, New York University, SSL, NYU Tandon. 2024—2025

Chairperson (2022—23) & Joint secretary (2021—2022) of the IEEE Students' Chapter, Silicon Institute of Technology.