Anubhab Patnaik

March 29, 2025

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#### **EDUCATION**

**New York University** 

New York, US

Master of Science in Computer Engineering

Sept 2024 — Expected Dec 2025

Silicon Institute of Technology

Bhubaneswar, IN

Bachelor of Technology in Computer Science & Engineering

July 2019 — May 2023

# **EXPERIENCE**

DatingAI

Bengaluru, IN

Software Engineer

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++

**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 recommendation system and a rating prediction system with 95% acc RESOC - 8

A college resource-sharing platform with taskboard & community chat, 200+ active users within the first 3 months. **Live°**WEBCHAT - & GunJS, 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.