

Siddharth Kundu

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PROFESSIONAL SUMMARY

Senior Software Engineer with 5+ years of experience architecting and delivering high-scale, data-intensive backend systems and seamless full-stack applications. Proven expertise in designing and optimizing distributed systems using Go, Python, and PostgreSQL to process and normalize complex data. Demonstrated success in leading projects from conception to deployment, collaborating cross-functionally to solve ambiguous technical challenges and deliver robust, maintainable solutions that power critical business infrastructure.

SKILLS

Languages: Go, Python, JavaScript, TypeScript

Backend: Gin, Python, FastAPI, Node.js, Expressjs, REST APIs, WebSockets, gRPC, Kafka

Frontend: React, Next.js, React Native, Redux, React Query, TailwindCSS, Jest, Cypress

Databases & ORMs: PostgreSQL, GORM, SQLAlchemy, MongoDB, Mongoose

Infrastructure & Devops: AWS (EC2, S3, Lambda), Docker, Kubernetes, Kafka, CI/CD (GitHub Actions, Jenkins)

Core: Software Architecture, Prototyping, Performance Optimization, High-Autonomy Development

WORK EXPERIENCE

Senior Software Engineer

March 2021 - February 2023

Dotpe | Tech Stack: Typescript, NextJS, Go, Gin, PostgreSQL, MongoDB, Webpack, gRPC, Kafka

- Engineered and optimized high-performance backend APIs in Go (Gin/GORM) to handle over 20K concurrent requests with sub-50ms latency, serving as the core data engine for merchant platforms.
- Architected and developed a suite of scalable backend microservices in Go, leveraging gRPC for efficient inter-service communication and Kafka to build an event-driven architecture for real-time order tracking, notifications, and merchant analytics pipelines.
- Optimized backend systems using Go, which resulted in a 50% reduction in server resource requirements, translating into approximately \$300,000 in annual savings for infrastructure costs.
- Led the end-to-end development of Digital Showroom, a platform enabling 1M+ merchants to launch online storefronts in under 30 seconds. Built the core application with Next.js and TypeScript, creating a high-conversion onboarding flow and SEO-optimized pages.
- Architected and built AdPro, an AI-powered data analytics dashboard for SMBs. Designed the frontend to intuitively visualize complex performance data and built the backend data aggregation pipelines, leading to its adoption by 500,000 merchants and a 40% increase in ROI.
- Owned the development of mission-critical, data-heavy admin features across web and mobile (React & React Native) for inventory, order management, and SKU handling, improving operational efficiency by 70%.
- Shipped critical features across React (Web) and React Native (iOS/Android) platforms for inventory, order management, SKU handling, Item variant creation, etc, improving merchant operations efficiency by 70%.

Software Engineer 2

August 2020 – February 2021

Acko Insurance | Tech Stack: React, NextJS, Node.js, Express

- Developed and optimized RESTful APIs using Node.js and Express to support dynamic product bundling and real-time pricing, contributing to a 25% add-on attachment rate.
- Enhanced React/NextJS customer portals, reducing page-load times by 60% to significantly improve user engagement and reduce bounce rates.
- Architected seamless inline add-on bundling UI e.g. engine protection, consumables, roadside, NCB protect, achieving a 25% add-on attach rate and reducing quote-to-purchase drop-offs by 20%.

Software Engineer

February 2020 – July 2020

Honeybridge | Tech Stack: Javascript, Typescript, ReactJS, GatsbyJS

- Developed a live video streaming platform using React, GatsbyJS, and WebRTC, achieving high user engagement and quality for over 10,000 users.
- Built backend utilities using Python and Flask to manage metadata and video stream sessions, enabling better performance monitoring and user analytics.

Software Engineer

January 2018 – February 2020

Vinculum Solutions | Tech Stack: Javascript, Typescript, ReactJS, Java

- Built and optimized React/TypeScript frontend interfaces for Vin eRetail modules (Order Management, Inventory Control, Catalog Management, etc.), enhancing UX and reducing workflow friction for enterprise clients.
- Developed a Seller Panel dashboard for vendors to manage listings, orders, and inventory across marketplaces like Amazon and Flipkart, improving seller efficiency and accelerating onboarding.
- Integrated the frontend with Java REST APIs for real-time data synchronization and implemented responsive design and performance optimizations, resulting in a 20% boost in user satisfaction and system scalability.

PROJECTS

E-Commerce Microservice Platform | Go, Gin, gRPC, GraphQL, Kubernetes

- Designed and implemented a cloud-native, distributed e-commerce system using a microservices architecture to demonstrate scalable backend design patterns.
- Developed core services in Go (product, order, user) with gRPC for high-performance inter-service communication, ensuring low-latency data exchange.
- Implemented a GraphQL API gateway to aggregate data from multiple services, providing a single, efficient endpoint for client applications and reducing over-fetching.
- Containerized each service using Docker and orchestrated deployment with Kubernetes manifests to manage scalability, resilience, and service discovery.
- Utilized PostgreSQL for persistent data storage, ensuring data integrity and relationships between domains like orders and users.

PDF Research Assistant | NextJS, AWS S3, Langchain, OpenAI, PineconeDB, NeonDB

- Built an AI-native application that allows users to "chat with their documents." Implemented a RAG pipeline to enable semantic search and Q&A on uploaded PDFs, directly mirroring core product capabilities at Dart.

AI Music Generator | NextJS, Better Auth, Prisma, Python, Modal, Qwen 2.5, AWS S3, NeonDB

- Developed a full-stack platform featuring real-time AI-powered music generation. Designed intuitive UX flows for complex AI features, demonstrating the ability to ship LLM-powered products from end-to-end.

EDUCATION

New Jersey Institute of Technology

Master of Science in Computer Science

Relevant Coursework: Machine learning, Advanced Machine Learning, Deep Learning, Artificial Intelligence, Data Structures, Web Systems, Masters Project

Newark, NJ

Sept, 2023 – May, 2025