# Siddharth Kundu

#### NEW YORK CITY

#### PROFESSIONAL SUMMARY

Senior Full-Stack Engineer with 5+ years of experience designing and developing high-impact web applications using modern frameworks and robust back-end architectures in Go and Python. Led projects from conception to deployment in agile environments, delivering scalable solutions and measurable performance gains. Demonstrated expertise in code review, performance optimization, and debugging, ensuring best practices and efficient system operations.

#### **SKILLS**

- Frontend: JavaScript, TypeScript, React, Next.js, React Native, Redux, React Query, TailwindCSS, Jest, Cypress
- Backend: Java, Node.js, Express, NextJS API, Python, FastAPI, REST APIs, WebSockets, gRPC, Kafka, PostgreSQL
- Infrastructure & DevOps: AWS (EC2, S3), Docker, Kubernetes, CI/CD (Github Actions)
- Core Competencies: Full Stack Development, Algorithms, Performance Analysis, Debugging

## WORK EXPERIENCE

Dotpe Mar 2021 - Feb 2023

Senior Software Engineer

- Led the design and development of the Digital Showroom using Next.js and TypeScript, writing robust product development code and conducting design reviews with stakeholders; supported by Go APIs managing 20K+ concurrent requests.
- Architected and built AdPro, an AI-powered analytics dashboard for SMBs. Designed intuitive frontend data visualizations in React and implemented AI-driven data aggregation pipelines in Go, contributing to design reviews and a 40% increase in ROI.
- Designed and implemented a scalable UI platform using Next.js and TypeScript, supporting a high-conversion onboarding flow and SEO optimized merchant pages.
- Established and maintained a shared design system (Dot Design UI) across three cross-functional teams to standardize design language, reduce UI debt, and boost development velocity.
- Delivered critical features across React (Web) and React Native (iOS/Android) platforms by writing maintainable code and participating in code reviews to ensure best practices and system health.
- Collaborated with product and business teams in a fast-paced startup environment, participating in design reviews and debugging sessions to rapidly prototype and ship mission-critical features for both web and mobile platforms.
- Built backend APIs in Go (Gin + Gorm), writing production-level code and conducting routine code reviews to maintain accuracy, testability, and efficiency.
- Optimized backend systems using Go, achieving a 50% reduction in server resource requirements and approximately \$300,000 in annual infrastructure savings; actively debugged and triaged performance issues.
- Developed scalable backend microservices using gRPC and integrated a Kafka-driven event architecture for real-time order tracking, notifications, and merchant analytics, ensuring robust system health diagnosis.
- Implemented comprehensive testing strategies with Jest, React Testing Library, and Cypress to maintain 95% test coverage and uphold software test engineering best practices.

Acko Insurance Aug 2020 - Feb 2021

Software Engineer 2

- Enhanced React/NextJS portals by reducing page-load times by 60%, integrating debugging practices and thorough code reviews to boost customer engagement.
- Improved cross-browser and mobile compatibility through BrowserStack, achieving a 99% regression-test pass rate and adhering to software test engineering standards.
- Architected a seamless inline addon bundling UI (e.g., engine protection, consumables, roadside, NCB protect), achieving a 25% addon attach rate and reducing quote-to-purchase drop-offs by 20% while actively triaging system issues.

Honeybridge Feb 2020 - Jul 2020

Software Engineer

- Developed a live video streaming platform using React, GatsbyJS, and WebRTC, contributing to enhanced system health diagnosis and effective debugging for over 1000 users.
- Built backend utilities with Python and Flask to manage metadata and video stream sessions, ensuring efficient API performance and smooth system operations.

Vinculum Solutions Jan 2018 - Feb 2020

Software Engineer

• Engineered and optimized React/TypeScript frontend interfaces for Vin eRetail modules (Order Management, Inventory Control, Catalog Management), delivering robust product development code and improved UX.

- Developed a Seller Panel dashboard that integrated Java REST APIs for real-time data synchronization, enhancing seller efficiency and accelerating multi-marketplace onboarding.
- Integrated frontend systems with Java REST APIs, actively participating in design reviews and applying performance optimizations to achieve a 20% boost in user satisfaction and system scalability.

#### **EDUCATION**

#### **New Jersey Institute of Technology**

Sep 2023 - May 2025

Master of Science, Computer Science

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

#### **PROJECTS**

# **PDF Research Assistant**

• Developed an AI-native full-stack application (Next.js, PostgreSQL, AWS) that allows users to semantically search and chat with their documents using a custom RAG pipeline.

### **AI Music Generator**

• 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.

#### **E-Commerce Microservice Platform**

Designed and implemented a cloud-native, distributed e-commerce platform using a microservices architecture. Developed core
services in Go with gRPC for high-performance, low-latency communication and implemented a GraphQL API gateway to create
a single, efficient client endpoint, eliminating over-fetching. The entire system was containerized with Docker, orchestrated with
Kubernetes for scalability and resilience, and utilized PostgreSQL to ensure robust data integrity and management.