

SHANTANU SINHA

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SUMMARY

Visionary Full-Stack Engineer with 6+ years of experience transforming complex challenges into scalable, high-performance solutions. Proven expertise in Python, Node.js, React, NextJS, and DevOps practices, specializing in CI/CD, Docker, and AWS. Spearheaded major initiatives in microservices architecture, cloud-native solutions, and performance optimization, consistently delivering world-class results. Known for technical leadership, creativity, and driving projects to completion.

TECHNICAL SKILLS

Languages	Frameworks
• JavaScript (Node.js/TypeScript) • Python • Golang	• ReactJS • NextJS • Redux • NestJS • Express
Databases	Cloud & Networking
• PostgreSQL • MySQL • MongoDB • Redis	• AWS (ECS, Lambda, EC2, CloudWatch, Route53, VPC, S3) • Nginx • ALB
DevOps	Monitoring & Observability
• CI/CD • Jenkins • Docker • Kafka • SQS	• Prometheus • Grafana • Elasticsearch (ELK)
APIs	Real-time & Async Communication
• REST • GraphQL	• WebSockets • CDN • AWS Lambda

WORK EXPERIENCE

Senior Software Engineer

Rattle Software Private Limited
Remote-Hybrid

03/2023

- Spearheaded the development of Project Board, delivering a highly customizable visual representation of Salesforce data and improving data management by 50%.
- Architected full-stack solutions with React, NextJS, and Redux, while driving cross-team collaboration to ensure on-time feature delivery.
- Engineered high-performance backend services in Python, Node.js and NestJS, reducing load times by 50% through optimized data structures and advanced caching.
- Led the implementation of CI/CD pipelines via GitHub Actions, accelerating deployment cycles by 40% and enhancing system reliability.
- Orchestrated the setup of Docker-based microservices on AWS ECS with Nginx and ALB, improving system scalability and handling 5.79 RPS.
- Enhanced system observability and security using Prometheus, Grafana, AWS CloudWatch, and AWS Firewall.

Senior SDE-2 (Backend Heavy)

Slice
Remote

05/2021 - 03/2023

- Led the successful revamp of user onboarding flows, boosting user engagement by 25%.
- Engineered the database scaling strategy with PostgreSQL replication and sharding, handling peak load of 10K RPS and increasing system resilience.
- Designed microservices architecture in Python & Node.js, Kafka, AWS S3, Lambda and AWS ECS, optimizing the system for document processing and reducing errors by 30%.
- Reduced release cycles by 30% through automated CI/CD pipelines(Jenkins), improving deployment reliability.

Full Stack Engineer 2

eloelo

Bengaluru, India

09/2020 - 05/2021

- Transformed python based monolithic systems into cloud-native microservices, deploying them on AWS ECS(ECR + Bitbucket Pipelines) and driving 40% improvement in system performance.
- Built CDN for video streaming and WebSockets using React for real-time user interactions, elevating user experience by 30%.
- Implemented notification systems using AWS SQS & AWS Lambda(Python), boosting notification delivery speed by 5x.

Full Stack Engineer - 1 (Backend Heavy)

Pratilipi

Remote-Hybrid

08/2019 - 08/2020

- Pioneered the development of a reporting system that reduced manual reporting time by 30%.
- Engineered scalable APIs with Python, Flask, Node, Express, Golang, GraphQL, optimizing data retrieval and improving response times. Took charge of Full-stacking project using Python and React

Full Stack Engineer - 1

Goodera

Bengaluru, India

06/2018 - 07/2019

- Spearheaded the revamp of an AngularJS-based product, reducing page load times by 20% and increasing user retention.
- Designed and implemented full-stack features in Node.js and React, driving 15% increase in overall user engagement.

KEY PROJECTS

Rattle - Project Board

Tech Stack: Node.js, Python, NestJS, React, NextJS, Redux, AWS (ECS, Nginx, ALB), GitHub Actions, AWS CodeBuild, CodeDeploy, Terraform (IaaS)

Role: Project Lead (Led a team of 2 Frontend developers, 1 QA, and 1 Backend developer)

Responsibilities: Backend development, microservices deployment, CI/CD integration, IaaS using Terraform

Description: Developed a visual representation of Salesforce data, improving data management by 50%.

Duration: Since April 2023

Slice - Credit Report Microservice, Document Management Microservices, Application Flows Revamp

Tech Stack: Python, Node.js, Kafka, PostgreSQL, AWS (S3, Lambda, ECS), Jenkins, AWS CloudFormation (IaaS)

Role: Project Lead (Led a team with 1 Android developer, 1 iOS developer, and 1 QA)

Responsibilities: Microservices architecture, CI/CD with Jenkins, IaaS with CloudFormation

Description:

- Credit Report Service: Developed a credit report generation system, handling peak load of 10K RPS. (Jan 2022 - Mar 2022)
- Document Management Service: Architected and deployed document management services on AWS. (May 2022 - Aug 2022)
- Application Flows Revamp: Redesigned user onboarding flows, improving engagement by 25%. (Jun 2021 - Dec 2021)

eloelo - Monolith to Microservices, Notifications Service, Admin Dashboard

Tech Stack: Python, AWS (ECS, Lambda, SQS), React, Node.js, WebSockets, Bitbucket Pipelines (CI/CD)

Role: Independent Contributor

Responsibilities: Migrated architecture, developed backend services, implemented CI/CD using Bitbucket Pipelines

Description: Migrated monolithic architecture to microservices, improved notification delivery speed 5x

Duration:

- Monolith to Microservices: Sept 2020 (15 days)
- Notifications Service: Nov 2020 (2 weeks)
- Admin Dashboard: Dec 2020 (2 weeks)

Pratilipi - Home Feed Recommendations, Customer Support Chat, Admin Dashboard

Tech Stack: Python, Node.js, React, GraphQL, WebSockets, Freshdesk APIs, Jenkins, AWS ECS

Role: Solo Contributor

Responsibilities: Developed personalized recommendations, integrated chat support, admin dashboard development, CI/CD with Jenkins, ECS deployment

Duration:

- Home Feed Recommendations: Sept 2019 - Dec 2019
- Customer Support Chat: Jan 2020 - Mar 2020
- Admin Dashboard: Apr 2020 - Aug 2020

Goodera - Revamp of Application, Bulk Create/Update via Excel Service

Tech Stack: Node.js, AngularJS, React, Bitbucket Pipelines (CI/CD), AWS ECS

Role: Full-Stack Developer

Responsibilities: Revamped the application, implemented CI/CD using Bitbucket Pipelines, developed bulk data operations

Duration:

- Revamp: Full duration of employment
- Bulk Create/Update via Excel Service: June 2019 (1 month)

ACHIEVEMENTS

• Honorable Mention at ACM ICPC 2016-2017 Regional Contest at NITTR, Kolkata. • Qualified for ACM ICPC 2017-2018 Regional Contest at Amritapuri, Kerala. • Solved 600+ algorithmic problems on CodeChef, Codeforces, and other competitive programming platforms. • Consistently recognized as a top performer across multiple projects for technical leadership and innovation.

EDUCATION

BTech in Computer Science, ABES Engineering College, Ghaziabad, India | 2014 - 2018