Soham Shinde

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EDUCATION

University of Texas at Dallas

Master of Science in Computer Science

Indian Institute of Information Technology, Kottayam

Bachelor of Technology in Computer Science and Engineering

EXPERIENCE

Software Engineer

Spoonified.me

- Dallas, TX • Led mobile development of a hardware enabled meal tracking mobile app in React Native and TypeScript, monitoring 100+ meals and 37 nutrition data points from a smart spoon.
- Engineered a Bluetooth Low Energy (BLE) framework for real-time data transfer with IoT hardware.
- Integrated an image recognition SDK enabling accurate identification of more than 1.5 million food items and developed a nutritional algorithm for meal metrics
- Utilized Redux for efficient state management, improving calculation times by 5% and enhancing performance.
- Leveraged AWS (S3, DynamoDB, Amplify) for secure storage and scalable backend; implemented GraphQL for efficient queries and Cognito for authentication.
- Integrated Firebase Crashlytics and remote logging reducing crashes by 30%.
- Synced data with Google Fit for comprehensive nutrition and fitness tracking.
- Designed intuitive UI/UX with animations and visualizations, continuously refined based on feedback.

Projects

Bill-Splitting SaaS Platform Backend | Spring Boot, JPA, PostgreSQL, Redis, JUnit Jan 2025 - Feb 2025

- Achieved 80% test coverage in the service layer by writing comprehensive unit tests using JUnit and Mockito.
- Implemented **Redis** with a read-through caching strategy, **improving expense retrieval speed by 80%**.

Grocers Bay | MERN Stack, Docker, JWT, Supabase, Kubernetes, Stripe, Grafana K6 Dec 2023 - Jan 2024

- Orchestrated an auto-scalable backend on Google Kubernetes Engine, increasing max concurrent users by 123% (85 \rightarrow 190) and handling 4,500+ users per hour through Kubernetes scaling, load balancing, and optimized CPU/memory limits
- Eliminated a 23.3% failure rate and reduced p90 response times by 41% (13.51s \rightarrow 7.91s), allowing the system to support higher concurrent traffic while ensuring stable response times under peak load
- Enhanced backend efficiency, doubling concurrent request handling capacity while reducing API bottlenecks, improving throughput from 17 req/s to 38 req/s based on K6 performance tests

Ownership Management for Secure Deduplication in Cloud | Django, Python, Tkinter, AWSJan 2023 - Aug 2023

- Engineered a secure file deduplication system, integrating AES, SHA, and CP-ABE (Cipher Policy Attribute-Based Encryption) and various data structures, resulting in a 70% reduction in deduplication time.
- Deployed the optimized system on AWS EC2, contributing to a publication in Springer on advancements in secure cloud storage.
- **Online Video Conferencing Application** | *Express.JS*, WebRTC, OAuth 2.0 Jan 2022 - Apr 2022 • Led a team of 2 to develop a low-cost peer-to-peer video conferencing web application using WebRTC, Node.js, and Express.JS. Incorporated Google OAuth 2.0, real-time chat, and screen sharing, following SDLC Agile methodology and MVC patterns, reducing operational costs by 90%.

Technical Skills

Languages: JavaScript, TypeScript, Python, Java, C++, Go, SQL, PHP Frontend: ReactJS, React Native, HTML, CSS, SASS, EJS, JQuery, Redux, Zustand, AJAX Backend: Node.js, Express.js, GraphQL, Socket.IO, Mongoose, Django, Kafka, JSP, RabbitMQ, Hibernate, JDBC Databases: PostgreSQL, MySQL, MongoDB, Redis, NoSQL, DynamoDB **Design Patterns**: Serverless, Microservices, JWT DevOps and Cloud: Git, GitHub, GitLab, AWS, GCP(Google Cloud Platform), Firebase, Supabase, Heroku, CI/CD (GitHub Actions), Docker, Kubernetes, Maven

Aug 2023 - May 2025 Kottayam, Kerala

Dallas, TX

Aug 2019 - May 2023

Jun 2024 - Feb 2025