Shreyansh Raj

shreyanshrc01@gmail.com | linkedin.com/in/shreyanshraj | github.com/shreyanshraj | shreyanshraj.com

SUMMARY

Full-stack software engineer with 5+ years building web and mobile apps (TypeScript, React, React Native) and the cloud backends behind them (AWS, Firebase, REST APIs). Owns features from design through production, works directly with stakeholders and designers, and mentors junior engineers. AWS Certified Developer – Associate

EXPERIENCE

Objectways Technologies | Software Engineer May 2026 – Oct 2026

Tech: Python, AWS (S3, Boto3), Imitation Learning

- Collected 2,000+ teleoperated demonstration episodes on Trossen robotic arms across everyday home tasks, rejecting under 2% as failed to deliver clean training data for home-robot learning models
- Developed a nightly Python pipeline in one week that validates robot episodes for missing camera streams and corrupt files, then uploads about 30 GB of video and sensor data to S3, **saving the 3-person annotation team 2 hours of manual work daily**
- **Optimized the teleoperation workflow** by tuning a wait parameter so operators set up once instead of after every episode, saving about 3.6 hours of operator time daily across 13 operators

Arizona State University | Graduate Student Software Engineer Oct 2023 – May 2026

Tech: TypeScript, Python, React, AWS (DynamoDB, Lambda, RDS, IAM), Firebase, GitHub Actions, LLM tool calling, REST APIs

- Designed and led delivery of "Huddles," an LLM-powered meeting tool built with TypeScript and React that auto-generates agendas using LLM tool calling and batched API calls, with a projected **45% reduction in meeting preparation time**; added GitHub Actions checks to validate every push to staging; partnered with designers to refine UI and UX
- Built a shift-scheduling mobile app from scratch on Firebase (Firestore, Auth, Cloud Functions, FCM) for 15 direct reports across 2 campuses, handling around 100 shifts a week
- Led configuration and rollout of a campus-wide **inventory management platform for 1,000+ users**, automating reconciliation and saving 2,000+ hours of manual work a year; trained 20 people, including 15 direct reports and 5 supervisors and school leaders
- Managed 15 direct reports across 2 campuses, **improving equipment-team efficiency by 30%**; built training plans for 10 junior assistants that cut onboarding from about 1 month to 2 weeks

Tata Consultancy Services | Software Developer-2 Mar 2022 – Jul 2023

Tech: SAP S/4HANA, ABAP OO, Adobe Forms

- Provided production support for two enterprise clients in consumer electronics and banking, resolving defects, tuning performance, and supporting go-live, while translating stakeholder requirements into solutions and mentoring junior developers

Infosys Limited | Software Developer Jan 2019 – Mar 2022

Tech: SAP S/4HANA, ABAP OO, CDS Views, AMDP, RFC, BAPI, SQL

- Engineered a data migration tool that moved Work Breakdown Structure (WBS) data from legacy systems into a new S/4HANA platform at **1M records a week**, cutting upload time by 50% with no manual monitoring, and built reconciliation reports that flagged failed uploads
- Delivered 15+ custom software components for a greenfield implementation across 3 countries, working with development, business and security teams

TECHNICAL PROJECTS

Pitchfork Pantry | React Native, TypeScript, Firebase App Store and Google Play submission in preparation

- Sole developer of a mobile app for a food pantry organization, with load balancing and capacity planning for ~500 weekly students across 4 campuses and up to 10 concurrent check-ins; implemented QR-based check-in and authentication, **cutting check-in time from ~20 seconds to under 3 seconds**; added dynamic surveys, a waitlist, and volunteer tracking

Cab Trajectory Visualization | Pandas, D3.js | GitHub Link August 2024

- Cleaned 500K+ GPS cab-trip records with Pandas and plotted trip trajectories on an interactive map with D3.js, enabling sub-second exploration of spatial demand patterns

Real-Time Face Recognition on CCTV Streams | AWS (EC2, SQS, S3, Lambda), Docker, Kubernetes, OpenCV | GitHub Link October 2025

- Built a serverless computer-vision pipeline sustaining 500+ frames/min with auto-scaling; cut end-to-end latency 80% via async SQS messaging and batched Lambda invocations; fixed Lambda cold starts by keeping an instance warm, making processing ~40% faster

EDUCATION

M.S. in Computer Science, Arizona State University Aug 2023 – May 2025

B.Tech. in Information Technology, Maharaja Agrasen Institute of Technology Aug 2014 – May 2018

SKILLS & CERTIFICATIONS

Languages: TypeScript, JavaScript, Python, Java, SQL

Frontend & Mobile: React, React Native, Firebase (Firestore, Auth, Cloud Functions, FCM), REST APIs, UI/UX collaboration

Backend & Data: FastAPI, Microservices, Event-Driven Architecture, PostgreSQL, MongoDB, MySQL, DynamoDB; Kafka (foundational)

Cloud & DevOps: AWS (Lambda, SQS, S3, EC2, ECS, API Gateway, AppConfig, IAM, CDK, CloudWatch), CloudFormation, Docker, Kubernetes, CI/CD (GitHub Actions, Jenkins)

Certification: AWS Certified Developer – Associate