

SREECHARAN DESU

Full-stack engineer specializing in backend systems, API design, and scalable Node.js architectures with real-world production experience.

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TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, SQL

Frameworks & Libraries: React, Next.js, Node.js, Express, Prisma, Hono, Tailwind CSS, Framer Motion

Tools & Infrastructure: PostgreSQL, MongoDB, Redis, Git, Docker, AWS, NGINX, CI/CD, GitHub Actions, Linux, Vercel

WORK EXPERIENCE

Open Source Contributor

Mozilla Firefox Accounts (FxA)

February 2025 – Present

Global, Remote

- Architected metadata field propagation across user migration events for centralized telemetry systems.
- Contributed to infrastructure used by millions of users, ensuring high-fidelity data tracking during migrations.

Full Stack Intern

DocGen

March 2025 – April 2025

Remote, India

- Optimized frontend-to-API integration for an AI documentation platform, reducing latency by 40%.
- Implemented authentication flows and secure API interactions using JWT-based mechanisms.
- Improved API request handling and response efficiency.

SELECTED PROJECTS

UniZ | TypeScript, Prisma, PostgreSQL, Redis

- Architected scalable dashboard for 1,500+ student records; reduced admin effort by 40%.
- Optimized PostgreSQL schema with Prisma, improving query latency by 25%.
- Orchestrated secure RBAC and JWT-based authentication, ensuring institutional data integrity and granular access control.

reXa | Node.js, Express, MongoDB, JWT

- Engineered reward system for 500+ users, increasing engagement by 30%.
- Designed REST APIs using Express middleware architecture, handling 1k+ daily transactions at 99.9% uptime.
- Orchestrated secure JWT-based RBAC for fine-grained access control.

SynapStore | Go, Gin, PostgreSQL, Docker

- Designed inventory management backend with PostgreSQL and Docker, focusing on consistency and efficient query handling.
- Deployed containerized environments with Docker and optimized SQL queries for reliable operations.

UIDAI Systems | Python, FastAPI, Redis, Docker

- Architected DDD-based ingestion for biometric datasets with zero-downtime.
- Leveraged Redis caching strategies reducing retrieval latency by 75%.

DocgenAI | React, Tailwind CSS, Framer Motion, Vercel

- Engineered AI-powered documentation engine generating technical guides in <5s.
- Mitigated repeat inference costs by 35% through Redis-based caching.

BB84 Protocol | Python, Qiskit, Mathematics

- Simulated quantum-secure key distribution using vectorized numerical state-vector logic (1000x faster).
- Deployed sub-threshold eavesdropping detection and finite-key analysis with Hoeffding bounds.

CERTIFICATIONS

- Artificial Intelligence: Search Methods for Problem Solving – NPTEL (November 2025)
- Cloud Computing – NPTEL (November 2025)

LEADERSHIP & VOLUNTEERING

Student Volunteer

NSS UPES

October 2025 – Present

Contributing to community development and social initiatives while developing leadership, teamwork, and organizational skills. Actively engaged in meaningful projects that create a positive impact.

Head Representative

Helping Hands Organization RGUKT Ongole

August 2023 – July 2025

Organized Avirbhav fest events and raised funds for them. Led the Weekly ₹1 Challenge initiative.

Office Bearer

TechXcel

August 2023 – July 2025

Organized technical events Ornate 2K24 and 2K25 to foster knowledge sharing across campus.

EDUCATION

Rajiv Gandhi University (RGUKT) | B.Tech, Computer Science – CGPA: 9.3

2023 – 2027

Focusing on Distributed Systems and Backend Architecture with 9+ CGPA.

RGUKT (Pre-University Course) | PUC, Mathematics, Physics, Chemistry – 9.74 CGPA

2021 – 2023

Secured Top 1% in entrance examinations (Ranked 967 out of 73,500+ candidates).

Pragathi High School | SSC (Class X) – 10/10 GPA

2020 – 2021

Mandal-level Science Quiz Winner and School-level Chess Champion.

INTERESTS & ACTIVITIES

- Open Source:** Active contributor to community ecosystems.
- Content Creation:** Tech education on YouTube (~300 subs) and detailed engineering blogs.
- Hobbies:** Competitive Chess, Classic Dance.