

DARSHAN PATEL

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PROFESSIONAL SUMMARY

Skilled **Full-Stack Developer** with **4+ years** of experience in system design, cloud computing, and scalable solutions. Proficient in **JavaScript, TypeScript, Java, Python**, and frameworks like **React, Node.js, and Next.js**. Certified **AWS Cloud Practitioner** with strong problem-solving and collaboration skills. Experienced in managing **AWS Architecture** and guiding teams on technical decisions. Passionate about leveraging **generative AI and LLMs** to solve complex problems.

TECHNICAL SKILLS

Primary Skills: Full-Stack Development, System Design, Microservices, Cloud Computing, Serverless Architectures, Distributed Systems, API Development, DevOps, Automation, AWS Architecture, Generative AI, LLMs

Languages & Frameworks: JavaScript, TypeScript, Python, Java, React, Next.js, Node.js, Express, FastAPI, Spring Boot HTML, CSS, SQL, Bash

Tools & Databases: AWS Services (S3, Lambda, API Gateway, Cognito), Docker, Kubernetes, Terraform, Jenkins, CircleCI, MongoDB, MySQL, PostgreSQL, Redis, Elasticsearch, GitHub Actions, Ansible, JIRA

Testing & Build Tools: Jest, Webpack, ESLint, Babel, Cypress, Prettier

EXPERIENCE

PlayPower Labs

May 2020 – August 2023

Full-Stack Developer

Gandhinagar, Gujarat

- Built a Super Admin portal to manage **50+** organizations and **2,500+** users, streamlining operations and improving user management.
- Developed scalable APIs and AI-powered machine learning pipelines for the Rajasthan Government, enabling automated PDF processing and handling **13 million** assessments in 3 days with up to **30,000** concurrent scans.
- Digitized textbooks into interactive PDFs using in-house AI pipelines, boosting usage by **80%**, and automated real-time performance reports for **10,000+** parents via the WhatsApp API.
- Guided the development team on architectural decisions and mentored junior engineers, ensuring high-quality, performant, and maintainable code.

PlayPower Labs

May 2019 – May 2020

Front End Developer Intern

Gandhinagar, Gujarat

- Developed a scalable CMS using React, TypeScript, and AWS, boosting authoring efficiency by **40%**, reducing load times by **50%** for **10,000+** users, and cutting costs by **30%** with serverless architecture.
- Designed cross-platform UI components and delivered 4 responsive applications, enhancing user experience across devices.
- Built microservices in TypeScript with AWS Lambda, automating grading and data analysis workflows to improve CMS efficiency.

PROJECTS

Surgical Gesture Assistant | Swift, AWS S3, Auth0, MongoDB, FastAPI, Python

November 2024

- Developed an iOS app with MediaPipe and custom ML models for real-time gesture detection, secure Auth0 authentication, and AWS S3 video uploads.
- Built a scalable backend using FastAPI, Nginx, MongoDB, and Redis with Celery for asynchronous video processing, ensuring reliability with detailed logging and real-time push notifications.

URL Shortener | Next.js (frontend and backend), MongoDB

December 2022

- Designed and implemented a high-performance URL shortening service, leveraging principles from Alex Xu's System Design Interview to handle high-traffic scenarios with reliability.
- Developed features including link expiration, analytics tracking, and custom aliases to enhance functionality and user engagement.

EDUCATION

Memorial University of Newfoundland

Master of Applied Science in Computer Engineering

Sep. 2023 – May 2025

St. John's, Newfoundland and Labrador, Canada

Nirma University

Bachelor of Technology in Information Technology

July 2016 – May 2020

Ahmedabad, Gujarat, India

CERTIFICATES & PUBLICATIONS

AWS Certified Cloud Practitioner (Issued: December 2024)

[View Certificate](#)

Equitable Access to Intelligent Tutoring Systems Through Paper-Digital Integration

[Paper Link](#)

Published in International Conference on Intelligent Tutoring Systems, June 2022.

LEADERSHIP / EXTRACURRICULAR

International Society for Technology in Education Student Chapter

May 2018 – June 2019

President

Nirma University

- Led a team of **30+** members to organize **15+** events, including a tech fest and a comedy night with Sorabh Pant, boosting student engagement by **60%** and fostering an inclusive campus culture.

REFERENCES

Dr. Stephen Czarnuch

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