

YUG UPADHYAY

Full-Stack Product Engineer (AI-Augmented Development)

yugyugupadhyay@gmail.com | +91 9081084555 | github.com/Yug1921 | linkedin.com/in/yug-upadhyay | Ahmedabad, Gujarat, India

PROFESSIONAL SUMMARY

Full-Stack Developer with hands-on experience building production-grade web applications using React.js, Node.js, and AWS. Proven ability to optimize system performance (60s → 3s) and deliver responsive, scalable UI/UX. Seeking a software engineering role to contribute to real-world product development and grow within a collaborative engineering team.

TECHNICAL SKILLS

Languages: JavaScript (ES6+), Python, Java, C/C++, TypeScript, R

Frontend: React.js, Next.js, Redux, HTML5, CSS3, TailwindCSS, ShadCN UI

Backend: Node.js, Express.js, REST API Design, JWT Authentication

Databases: MySQL, MongoDB, Firebase (Firestore)

Cloud & DevOps: AWS (EC2, S3, Lambda, CloudWatch, IAM, VPC), CI/CD basics, Cloud Security

Developer Tools: Git, GitHub, Postman, Figma, Tableau, Power BI

Concepts: Data Structures & Algorithms, OOP (Java), Agile/Scrum, Cloud Security Fundamentals

PROFESSIONAL EXPERIENCE

Software Developer Intern — Sparks to Ideas

2023

- Developed and maintained production React components, improving UI consistency and user experience across the platform.
- Optimized React state management and custom Hooks, reducing unnecessary re-renders and improving performance for large data payloads.
- Built reusable, well-documented component libraries and collaborated in Agile sprints including code reviews and daily stand-ups.
- Worked closely with senior engineers to deliver features on schedule, gaining exposure to end-to-end software development workflows.

PROJECTS

DPI — Deep Packet Inspector

2025

Java · Node.js · Express.js · React.js · TailwindCSS · Multithreading

- Engineered an end-to-end DPI system to process PCAP files, classify network traffic by application or domain, and generate filtered PCAP outputs for cybersecurity and network monitoring use cases.
- Achieved 95%+ performance improvement, reducing processing time from ~60s to 1–3s via optimized multi-threaded worker shutdown, improved concurrency, and max-packet controls.
- Implemented concurrent flow and application statistics reporting covering active flows, app distribution, thread-level processing stats, and detected domains and SNI signals.
- Developed a React.js dashboard with persistent state management and downloadable analysis artifacts, enabling reliable demo and reporting workflows.

RMS — Restaurant Management System

2024

React.js · Node.js · Express.js · MySQL

- Built a full-stack restaurant management platform handling reservations, order tracking, and table bookings with secure, persistent data storage.
- Designed a fully responsive UI using React.js and Bootstrap; implemented RESTful APIs with Express.js for all CRUD operations.
- Applied a normalized MySQL database schema to ensure data integrity and efficient query performance under concurrent operations.

EDUCATION

B.Tech in Computer Science Engineering — Karnavati University

2022 – Present

Ahmedabad, Gujarat

Diploma in Information Technology — LJ University

2019 – 2022

CGPA: 7.50 / 10

Secondary Education (SSC) — Nelson's High School

2019

Score: 85.11%

CERTIFICATIONS

AWS Academy Graduate — Cloud Security Foundations

2026