SAKTHI B

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PROFESSIONAL SUMMARY

Final-year B.Tech Computer Science student (Cloud Computing, graduating 2027, CGPA 7.9) with hands-on experience in full-stack development, computer vision, cloud deployment, and DevOps. Skilled in Python, JavaScript, Java, FastAPI, Node.js, SQL/NoSQL databases, Linux, Docker, and Git. Built projects involving REST APIs, authentication, automated testing, and CI/CD pipelines. Eager to contribute programming and problem-solving skills as a Software Developer Trainee while learning real-world development, debugging, and documentation practices.

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, C++
Frontend: HTML5, CSS3, Tailwind CSS, React, Next.js
Backend & Databases: FastAPI, Node.js, MongoDB, PostgreSQL, SQLAlchemy, Alembic, Supabase, MySQL, REST APIs
Cloud & DevOps: Docker, Docker Compose, Kubernetes, GitHub Actions, CI/CD, GCP Cloud Run, Azure, AWS, Terraform, Vercel
AI/ML & Tools: YOLO (Ultralytics), OpenCV, LLM APIs (Groq), Pytest, Git, GitHub, Linux, Redis

PROJECTS

RetailIQ — Smart Retail Video Analytics [View on GitHub] · *FastAPI, Next.js, PostgreSQL, YOLO · 2026*

- Built a monorepo retail intelligence platform (FastAPI backend, Next.js dashboard) that runs YOLO11n object detection on images and video to track customer footfall, dwell time, and shelf stock levels.
- Designed REST APIs with async PostgreSQL persistence (SQLAlchemy, Alembic migrations), Redis sliding-window rate limiting, and an AI assistant using hybrid RAG (vector + BM25) with Groq LLM fallback and prompt-injection guardrails.
- Set up Docker Compose orchestration, GitHub Actions CI/CD pipelines, and a YOLO MLOps workflow (dataset validation, model registry, drift monitoring); maintained a 170-test Pytest suite.

CinTic — Intelligent Cinema Ticket Booking System [View on GitHub] · *Node.js, MongoDB, JWT · 2026*

- Built a full-stack movie ticket booking platform using Node.js, MongoDB, HTML, CSS, and JavaScript.
- Developed Vision IQ, a seat recommendation engine using geometric scoring, group optimization, and anti-seat-stranding heuristics.
- Implemented dynamic pricing, secure JWT authentication, role-based admin dashboard, and real-time revenue analytics.
- Optimized concurrent seat reservations using MongoDB atomic operations.

LinLearn — AI-Powered Linux Learning Platform [View on GitHub] · *Next.js, Supabase, Groq AI · 2026*

- Built a full-stack Linux learning platform using Next.js, TypeScript, Supabase, and Redis.
- Developed AI-powered mock interviews, command generation, cheat-sheet creation, and terminal error analysis.
- Implemented secure authentication, Row-Level Security, rate limiting, and AI usage quotas.

Smart Water Hydro System — IoT Full-Stack Dashboard [View on GitHub] · *GCP, Supabase, Docker · 2025*

- Deployed a Python backend on GCP Cloud Run behind a REST API and containerized it with Docker.
- Integrated Supabase for real-time cloud database sync and built a JavaScript dashboard for live sensor data visualization; automated deployments through CI/CD.

EDUCATION & CERTIFICATIONS

B.Tech — CSE (Cloud Computing), Alliance University, Bengaluru | 2023–2027
CGPA: 7.9 / 10

Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate — Oracle, 2026
Microsoft Azure Fundamentals (AZ-900) — Microsoft, June 2025
Introduction to HTML5 — Coursera, August 2024