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EDUCATION

Kakatiya Institute of Technology and Science (KITSW), Warangal Expected June 2028
B.Tech in Computer Science and Engineering | CGPA: **8.59 / 10.0**
Relevant Coursework: Data Structures & Algorithms, Operating Systems, Computer Networks, DBMS

TECHNICAL SKILLS

Languages: Java 21, Python, C, Oracle SQL, JavaScript (ES6+), TypeScript
Backend: Spring Boot 3.x, Spring Data JPA, Spring JDBC, Hibernate, Maven, REST APIs
Frontend: React, TypeScript, Vite, Tailwind CSS, HTML5, CSS3
Databases: Oracle ATP (19c), Oracle XE, PostgreSQL
Tools & Platforms: Git, GitHub, Oracle Cloud (OCI), Linux

PROJECTS

ManaVoter – Telangana Electoral Roll Search Engine manavoter.in | [GitHub](#)

Java 21, Spring Boot, React/TypeScript, Oracle ATP 19c, Railway

- Engineered a large-scale data ingestion pipeline using Tabula-java and Apache PDFBox to ingest, normalize, and load **1.23 crore voter records** across 6 districts into Oracle ATP, handling multi-format PDF extraction at scale.
- Designed a **Telugu consonant skeleton normalization algorithm** to resolve corrupted Type3 font encoding in ECI PDFs: strips diacritics to produce canonical forms, enabling accurate fuzzy search across variant spellings.
- Built a thread-safe immutable in-memory index via Spring Boot `@PostConstruct` for concurrent read access without synchronization overhead, achieving sub-100ms query latency on 12M records; deployed on Railway with custom domain and SSL.
- Reached **170+ users** and **1,100+ tracked events** post-launch with zero marketing spend.

Vertex Analytics – Self-Hostable Developer Analytics Platform [GitHub](#)

Java 21, Spring Boot 3.5, Spring JDBC, Oracle XE, Maven

- Designed and built a multi-tenant analytics REST API with normalized relational schema (**PROJECTS** → **EVENTS**); exposes aggregation endpoints for pageviews, heatmaps, sessions, and device stats.
- Authored a sub-2KB embed script utilizing `sendBeacon` for asynchronous non-blocking event telemetry, decoupling frontend page-unload cycles from backend ingestion; implements silent-fail semantics so tracker never disrupts host page load.
- Self-hostable by design; dashboard auto-refreshes every 10 seconds via aggregation queries across the **EVENTS** table.

KITS One – Student Academic Companion [Live Demo](#) | [GitHub](#)

HTML5, JavaScript (ES6+), Tailwind CSS

- Built a custom CGPA computation engine implementing KITSW URR-24 academic regulations — handles branch-specific credit rules and grade exclusions unsupported by any existing tool available to students.
- Reached **460+ active users** and **7,600+ tracked events** via GA4 with zero backend and zero hosting cost; adoption driven entirely by word-of-mouth within the college.

CERTIFICATIONS

Oracle Cloud Infrastructure (2025)

[OCI Foundations Associate](#) | [OCI AI Foundations Associate](#) | [OCI Data Platform Foundations Associate](#)

Harvard University – CS50x (2025): [Introduction to Computer Science](#)

RESEARCH

Dynamic VM Placement – Honors Research Replication [GitHub](#)

Java 21, CloudSim 7.0.1 | KITSW Honors & Research Program

- Replicated a genetic-algorithm-based dynamic VM placement solution (Mosa & Sakellariou, IEEE CLOUD 2019) balancing CPU and memory demand across physical machines.
- Evaluated across **5 datacenter scale configurations** (200/100 to 4000/2000 VMs/PMs) under normal and memory-skewed workloads; GA cut under-utilization to **45.4% vs. 74.4%** for baseline BFD at 200/100 scale.

LEADERSHIP & ACTIVITIES

Executive Member, Literary Club – KITSW 2025 – Present

- Coordinated debate and literary events across the department.

LANGUAGES

English: Full Professional Proficiency | **Hindi:** Native | **Telugu:** Bilingual Proficiency