Sharath Kumar Karnati

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SUMMARY

Results-driven **Software Engineer** with 1+ years of experience designing and building scalable **web applications and backend systems**. Proficient in JavaScript, TypeScript, Python, and C++, with strong expertise in **object-oriented programming, data structures, and algorithm** optimization. Experienced in **full-stack development** using modern frameworks (React, Node.js), RESTful APIs, and cloud platforms (AWS). Adept at **writing clean, maintainable code, implementing unit tests, and working in agile teams**. Passionate about solving real-world problems through technology and delivering high-performance, secure, and user-friendly software solutions.

EDUCATION

Master's in computer science - **Washington State University | GPA: 3.82/4.0**   **Aug 23 – May 25**
Coursework: Advanced Algorithms, Web Security, Artificial Intelligence, Data Science, Machine learning, Computer Vision.

Bachelors in Electronics and Communication Engineering - Vellore Institute of Technology| GPA: 7.79/10.0   **Jul 18 – Jun 22**
Coursework: C, Java, Python Programming, Data Structures, OOPS, Digital Logic Design, IoT Domain Analysis, Semiconductors, Circuits

PROFESSIONAL EXPERIENCE

Data Analytics - Peer Education Programs, OAE, Washington State University   **Sep 2024 – May 2025**
- Managed **performance tracking for 33+ peer mentors**, analyzing their **progress and service impact** on students.
- Developed **an automated tracker in Excel**, improving efficiency in monitoring mentor activities, resulting in an **80% increase in tracking accuracy**.
- **Collaborated with leadership** to refine peer mentor tracking processes, improving **data-driven decision making.** Presented findings on program impact to university committee, **influencing future mentor training strategies.**
- Designed a **web-portal** for centralized access to mentor details and **performance analytics, enhancing accessibility** and **reducing manual effort by 60%.**

Software Developer Intern – Vengai Software Solutions, Hyderabad   **Sept 2022 – Mar 2023**
- Developed and maintained dynamic web applications using **JavaScript, React, and Node.js**, optimizing performance and user experience.
- Built secure **authentication systems and interactive UI** components, enhancing functionality and reducing load times by **30%**.

PROJECTS

Regale – **the Recipe App,** Personal Project   **Jan 2025**
- Developed and scaled Regale, **a full-stack Recipe Search Web Application**, integrating MERN stack (MongoDB, Express, React, Node.js) with JavaScript and SCSS to provide **seamless user experience across 100,000+** recipes.
- Implemented secure **user authentication** with **JWT**-based login and registration, enabling personalized features like recipe bookmarking, **dynamic ingredient adjustments**, and custom recipe submissions.
- Optimized application architecture using **MVC principles**, **React components**, **RESTful APIs**, and **database storage management,** ensuring responsive UI, smooth navigation, and efficient data handling.

Stackr- **A Dropbox Clone,** Personal Project   **Apr 2025**
- **Built** a full-stack Dropbox clone using **TypeScript**, **react (with Hooks)**, and **Drizzle ORM** to enable users to **upload, store, and organize PDFs/images** into folders, improving file accessibility and user experience.
- **Integrated Clerk for OTP-based authentication** and **admin-level user management**, enabling secure, role-based access and streamlined onboarding for all user sessions.
- **Leveraged ImageKit for media delivery** and **Neon/PostgreSQL for scalable database management**, resulting in **optimized file handling** and a **50%+ improvement in media load times**.

Movie Recommendation System, Course Project   **Nov 2024**
- Built a **content-based movie recommendation system** using **Python and Stream lit**, leveraging **cosine similarity** on genres, actors, and directors for personalized suggestions.
- Designed an **interactive web app** with tabs for **recommendations, top-rated movies** (based on IMDb ratings), favorites, and bookmarking.
- Designed an **intuitive sidebar** for seamless navigation, enhancing user experience and accessibility.

CERTIFICATIONS

Advance Software Engineering Job Simulation, Walmart Global tech on Forage   **Feb 2025**
- Successfully completed **Walmart's Advance Software Engineering Job Simulation**, tackling real-world technical projects across multiple teams. **Created an optimized heap data structure,** designed detailed **UML class diagrams and ERD's** for efficient database management, and developed **Python ETL scripts** to automate data processing from spreadsheets into an SQLite database. This experience honed my **problem solving, software development, and database design skills**, making me well-equipped for tacking complex technical challenges.

TECHNICAL SKILLS

Programming: Python, Java, JavaScript, Typescript, C++, R, Nodejs, React, HTML, CSS
Database: PostgreSQL, MongoDB, MySQL, SQL
Libraries/Frameworks/Tools: Git, Docker, Postman, Express, Pandas, NumPy, RESTful API's, Pytorch, Scikit, TensorFlow, Pytest, Unittest, Django, Tableau, VS code, MS Excel, IntelliJ, Power-BI, Jenkins, Maven, Ansible, Figma, Redux
Cloud technologies & DevOps: Amazon Web Services (AWS) – S3, Lambda, EC2, Azure, CI/CD, Kubernetes
Development Practices: Documentation, Version control, Software design, Microservices, TDD, SOLID, Design Patterns, Agile and SDLC