SAI SATWIK BIKUMANDLA

Albany, NY | (518) 614-1904 | <u>saisatwikbikumandla9@gmail.com</u> github.com/SaisatwikBiku | linkedin.com/in/saisatwikb | Portfolio

Objective

MS in Computer Science (Systems Concentration) candidate seeking a **Software Engineer Intern** role to design and prototype modern, AI-driven recruitment platforms using modern and industry required technologies.

Key Skills

- **Frontend:** React (hooks, Router), TypeScript, Tailwind, responsive UI, UX prototyping with Figma, user flows, error/loading states.
- Backend: Node.js, Express; REST API design, validation, error handling, caching (in-memory TTL).
- Auth: JWT authentication, protected routes, session-aware UI updates.
- Data: MongoDB (schema design, aggregation, indexes), SQL basics.
- **Programming Languages:** JavaScript (ES6+), Python, Java, C++, SQL.
- Languages: English (fluent). Actively interested in learning Mandarin to support global collaboration.
- Dev & Deploy: Git/GitHub, Vercel, Render; build pipelines, environment secrets, health checks.
- **Testing:** Selenium, Jest, supertest (foundational coverage for backend APIs).
- **AI/ML** (**projects**): TF–IDF, cosine similarity, recommendation engines, top-k evaluation (Precision@k).

Education

University at Albany, SUNY — Albany, NY

Aug 2024 – Present

Master of Science, Computer Science (Concentration: Systems) | CGPA: 3.43/4.0

Relevant Coursework: Algorithms & Data Structures, Database Systems, Probability & Statistics, Software Engineering

Sri Indu College of Engineering and Technology — Hyderabad, India

Aug 2020 – Apr 2024

Bachelor of Technology, Computer Science & Information Technology | CGPA: 7.8/10

Projects

News Application (MERN, GNews API)

Jun 2025 - Jul 2025

React, React Router, Node/Express, MongoDB, JWT, Vercel/Render

- Prototyped and deployed a full-stack news app with **JWT authentication**, protected routes, and session-aware UI updates.
- Built scalable REST endpoints with query params and caching (in-memory TTL) to reduce repeated API calls.
- Designed MongoDB collections for *user-scoped Saved News* with duplicate-prevention per user.
- Applied responsive UI and reusable React components with loading/error boundaries.
- Deployed FE on **Vercel**, BE on **Render**; configured health checks and environment secrets.
- Live: news-application-self.vercel.app

Movie Recommendation System (Content-based AI/ML)

Jun 2025 - Jul 2025

Python, pandas, scikit-learn, TMDB dataset

- Developed an AI-powered recommender using **TF-IDF** and **cosine similarity** across ~5k movies.
- Built preprocessing pipeline (tokenization, lemmatization, stop-word removal).
- Achieved **Precision@5 = 0.60**; documented methodology and limitations.
- Live: movify-mrs-759911d1e181.herokuapp.com

CommitMoji (TypeScript, React, Tailwind, Vite)

2025

TypeScript, React, Tailwind, Vite, Vercel

- Designed a lightweight SPA catalog of Git commit emojis with one-click copy features.
- Implemented accessible TypeScript-first components with responsive styling.
- Deployed on **Vercel**; optimized build pipeline and meta tags for SEO.
- Repo: github.com/SaisatwikBiku/CommitMoji | Live: commitmoji.vercel.app

Experience

Executive Assistant to CEO — eSahayak — Remote

Mar 2024 – Jun 2024

Internship | JavaScript, React.js

- Enhanced project tracking and documentation for leadership team decisions.
- Delivered React.js UI enhancements, improving customer-facing page load times by 10%.
- Triaged/reproduced bugs with detailed documentation, accelerating resolution of 5+ issues.

Web Developer Intern — Rethink UX — Remote

Oct 2022 – *Dec* 2022

JavaScript, HTML/CSS, SQL, CMS, Git

- Delivered client-facing SaaS web modules, contributing to a 15% boost in satisfaction.
- Refactored pages to static templates, reducing load times by 20%.
- Strengthened SQL-based data integrity with role-based access controls.

Developer Advocate — StudyExperts — Remote

Jun 2022 – Aug 2022

Python, MySQL

- Authored 10+ tutorials in Python & MySQL, driving 25% higher user engagement.
- Reduced customer tickets by 30% with step-by-step product guides.
- Logged 5+ critical bugs and documentation updates, improving product stability.

Additional Work Experience

Student Assistant (Parking Operations) — SUNY Athletics — Albany, NY

Jul 2024 – Present

- Coordinated event parking for 5,000+ visitors, ensuring smooth flow and positive experiences.
- Strengthened customer-first communication skills while resolving on-site issues under pressure.

Highlights

- Shipped two production-grade deployed apps with documentation and live demos.
- Solid foundation in data structures, algorithms, and database systems.
- Experienced in end-to-end ownership: backend APIs \rightarrow data persistence \rightarrow frontend UX \rightarrow deployment.