

SAICHARAN VISHWANATHA

☎ +1-970-213-5350

✉ saicharan.vish@gmail.com

🌐 linkedin.com/in/charan-v98

🐙 github.com/saicharan

Education

Colorado State University

Master of Science in Computer Science

- Cumulative GPA: 3.86/4.00

August 2023 – May 2025

Fort Collins, Colorado, USA

Gokaraju Rangaraju Institute of Engineering and Technology

Bachelor of Technology in Computer Science

- Cumulative GPA: 3.71/4.00 with Gold Medal

June 2019 – May 2023

Hyderabad, Telangana, India

Technical Skills

Languages: Python, Java, JavaScript, TypeScript, C++, HTML/CSS, SQL

Databases: MongoDB, MySQL, PostgreSQL

Web Technologies: ReactJS, NodeJS, TailwindCSS, ExpressJS, WordPress, Bootstrap, jQuery

Design Tools: Figma, Adobe XD

Cloud Developer Tools: AWS, Azure

Technologies/Frameworks: Docker, Kubernetes, GitHub Actions, Linux, Jenkins, Junit, VS Code

Experience

Tilt

Software Engineer

Jan 2025 – May 2025

Fort Collins, Colorado, USA

- Led usability audits and faculty focus groups for the TILT website, driving a 30% boost in user satisfaction and implementing key content revisions that raised feedback scores by 40%.
- Designed high-fidelity Figma prototypes and collaborated on accessibility enhancements, achieving over 90% WCAG 2.1 compliance and increasing engagement by 25%.

TCS (Tata Consultancy Services)

Software Engineer

August 2022 – June 2023

Hyderabad, Telangana, India

- Developed responsive UI components in ReactJS for CRM and finance systems, improving load times by 20% and reducing data entry errors by 15%.
- Built order tracking dashboards and financial data views, cutting navigation complexity by 30%.

Smart Interviews

Student Mentor

August 2021 – April 2022

Hyderabad, Telangana, India

- Mentored 50+ students in algorithm optimization, debugging, and prototyping web/mobile features—boosting coding efficiency by 20% and helping 80% secure internships or job offers.
- Led 15+ pair programming sessions and mock interviews, improving code quality by 40% and accelerating technical skill development by 30% through hands-on collaboration.

Projects

Portfolio Website | *JavaScript, ReactJS, HTML, TailwindCSS*

- Objective: To create a personal portfolio website to showcase projects, skills and experience with a responsive interface.
- Crafted a responsive site using React, JavaScript, HTML, and TailwindCSS, showcasing 3 projects and achieving a 40% increase in portfolio engagement through clean UI and smooth user interactions.

Personalized Recipe Generator | *Node.js, React.js, HTML, CSS, MongoDB, OpenAPI, JavaScript*

- Objective: To streamline personalized meal planning by generating recipes based on user preferences, dietary needs, and available ingredients.
- Built a full-stack web app using React.js, Node.js, and MongoDB, integrating OpenAI API and a grocery API—boosting user engagement by 30% and reducing meal planning time by 50%.

Evaluating LLMs in Providing Indirect Debugging Hints | *Python, OpenAI, Anthropic API, ChatGPT, Claude AI*

- Objective: To compare ChatGPT and Claude AI in generating indirect debugging hints for novice programmers.
- Designed a Python pipeline using OpenAI and Anthropic APIs to analyze buggy code and generate hints, with ChatGPT achieving an 80% success rate based on feedback from 50+ users.

Mouse Cursor Control Using Facial Movements | *Python, Dlib, OpenCV, NumPy, Imutils*

- Objective: Develop a hands-free mouse control system using facial and eye gestures to improve computer accessibility for physically challenged users.
- Created a solution using Dlib, OpenCV, and NumPy; optimized 100+ EAR and MAR thresholds to achieve 95% gesture recognition accuracy, increasing usability by 60% and user independence by 50%.