

Surabhi Chavan

+1 (619) 666 2309 | California | schavan2264@sdsu.edu | [LinkedIn](#) | [GitHub](#) | [Medium](#)

SKILLS

Languages:	JavaScript (ES6+), TypeScript, Python, SQL
Web and Databases:	Angular, React, Node.js, REST APIs, PostgreSQL, Three.js, UI/UX, HTML/CSS
Development Tools:	Git, Gulp, Docker, CI/CD, Agile, Figma, Postman
Project Management:	Confluence, GitHub, Bitbucket, Microsoft Office

EXPERIENCE

Software Research Assistant Agentic AI, LLM, AutoGen, GenAI	Jan 2025 – Present
AI4Business – San Diego State University	CA, USA
<ul style="list-style-type: none">Developed a novel approach to reduce LLM hallucinations Agentic AI Systems and frameworks like AutoGen.Designed a Machine Learning model for handwriting recognition using Supervised Learning, achieving a 92% success rate.Fine-Tuned Deep Learning models like AlexNet (CNN) in MATLAB for image classification to achieve 90% accuracy.Designed an NLP model to detect phishing emails by analyzing patterns, improving email threat detection accuracy by 30%.	
Software Engineer JavaScript, Angular, RxJS, Node.js, Gulp, REST API, Docker, Git	Sep 2022 - Aug 2024
JSat Automation Inc.	India
<ul style="list-style-type: none">Designed and prototyped e-workflow validation software and cleaning scheduler including research and prototyping in Figma, enabling protocol testing, deviation handling, and workflow validation through cross-functional collaboration.Built a scheduling system using Angular and REST API, allowing pharma firms to efficiently plan and execute cleaning tasks.Optimized containerized remote view screen for real-time updates using TypeScript to boost usability by 60%.Digitized operational workflow steps via Python, significantly cutting down paper usage and streamlining processes by 80%.Developed responsive UI in Angular, leveraging RxJS for efficient data streaming and state management across applications.Implemented Docker for containerization and troubleshooting, boosting system reliability, reducing downtime.Utilized SQL in PostgreSQL to optimize query performance and streamline data retrieval, enhancing database efficiency.Enhanced scalability and streamlined application workflows by implementing a robust microservices architecture.Configured Gulp tasks for JavaScript transpilation, CSS preprocessing and image optimization, reducing build time by 40%.Utilized Three.js and WebGL to design and implement interactive 3D models in a web application, enhancing the user experience with immersive, visually engaging interfaces.Ensured all project related documentation was developed and updated including design, development and testing.	
Software Engineer Intern Java, Spring Boot, AWS, Bitbucket	Mar 2022 - Aug 2022
Qualys Security	India
<ul style="list-style-type: none">Developed automation scripts for stand-alone tools utilizing Java and Spring boot, improving efficiency by 40%.Deployed microservices on AWS (EC2, Lambda), leveraging S3 for storage and RDS for database management.Identified common vulnerabilities and exposures (CVEs) in clients' applications, enhancing security measures & risk mitigation.	

EDUCATION

San Diego State University, USA	Aug 2024 - Present
<i>Master of Science in Information Systems</i>	GPA: 3.4/4
Savitribai Phule Pune University, India	May 2018 - Apr 2022
<i>Bachelor of Engineering</i>	GPA: 3.8/4

PROJECTS

ROOM Next.js, TypeScript, Clerk, getstream, shadcn, Tailwind CSS	
<ul style="list-style-type: none">Developed a Zoom-like platform using Next.js and TypeScript, for users to securely authenticate, create and manage meetings.Integrated Clerk for secure authentication and authorization, supporting social logins and email/password access.Implemented key features such as recording, screen sharing, and scheduling, ensuring a seamless user experience.	
Web Dev Compiler React, TypeScript, shadcn, Tailwind CSS	
<ul style="list-style-type: none">Developed an online HTML, CSS, and JavaScript compiler like CodePen using React, Redux, and Vite.Integrated persistent login states and user authentication using cookies.Built RTK Query for API interaction with TypeScript, enabling user creation, CRUD operations, & data caching techniques.	