

# Surabhi Chavan

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## 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

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

## EDUCATION

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

## PROJECTS

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