Dhairya Chhabra

J 619-572-2643

■ dchhabra2680@sdsu.edu in linkedin.com/in/dhairya-chhabra ithub.com/dhairya2001

Education

San Diego State University | M.S in Computer Science, San Diego, CA Aug. 2024 - May 2026

Savitribai Phule Pune University | B.E in Computer Engineering, India

Aug. 2019 – May 2023

Work Experience

SDSU Research Foundation | TechStack: Python, SHELL, Docker

 $\mathbf{Sep.}\ \ \mathbf{2024-Dec.}\ \ \mathbf{2024}$

Research Assistant, Part-Time

San Diego, CA

- Developed and maintained modular Python scripts to automate the MRIQC pipeline, incorporating logging, error handling, and unit testing to ensure code reliability and maintainability across research projects.
- Analyzed MRI data and performed ETL to clean and process large datasets; generated detailed visual reports to support research and clinical diagnosis, improving understanding and assessment of ASD-related neuroanatomical features.
- Containerized the MRIQC pipeline using Docker to create a consistent and reproducible environment for processing MRI data, which **reduced setup time by 30%** and ensured reliable quality control across different systems.

AFour Technologies | **TechStack**: ReactJS, NextJS, NodeJS, Java, MongoDB, AWS Software Engineer (Full-Stack)

Mar. 2023 – Mar. 2024 Pune.India

- Deployed and maintained AI-powered React apps with dynamic data on AWS, improving uptime and efficiency through automated workflows and performance tuning achieved 99.9% uptime and a 20% boost in deployment efficiency.
- Built a resignation portal for the ERP system using React.js, NodeJS, and MongoDB, **creating robust APIs and integrating a relational database** which enhanced system efficiency and user experience.
- Refactored complex legacy code and optimized critical business logic, **cutting front-end compile time by 10%** to significantly boost developer efficiency and accelerate product release cycles.
- Optimized Java-based APIs to retrieve only relevant data, improving data handling efficiency and reducing response time, which enhanced overall software performance by 50%.

Digilytics Systems LLP | **TechStack**: ReactJS, NodeJS, Python, Team Leadership Software Engineer Intern

Dec. 2021 – May 2022

Pune,India

- Led a team of 5 developers to build a No-Code web application with drag-and-drop functionality, enabling over 500+ non-technical users to create static websites easily, increasing their sales by ~ 20%.
- Developed scalable and responsive components using React.js within an Agile, Scrum framework; built distributed systems to improve software performance and gained hands-on experience in enterprise-grade development.
- Enhanced code quality by following clean code practices and designing a user-friendly UI, which **improved user experience by 30%** and maintainability by reducing code complexity by 25%, while increasing code readability and enabling faster future enhancements.

Projects

Wordcorn & | TechStack: NextJS, Typescript, NodeJS, Python

- Developed an English vocabulary learning platform using NextJS, attracting 1,300+ users and increasing learning efficiency by 40% through interactive quizzes and goal-tracking features.
- Leveraged Supabase and Python to develop an AI-based learning platform with real-time updates, reducing response time by 35% and increasing user engagement by 25% through personalized Gen AI-driven content.

Healthcare Information Exchange using Blockchain 6 | TechStack: React Native, Web3, MYSQL

• Developed a secure patient data exchange system using React Native for the frontend and MetaMask for secure transactions, reducing data breaches by 15% and increasing user verification accuracy by 25% through secure SQL integration.

BudgetWise - Expense Manager & | TechStack: ReactJS, NodeJS, MongoDB, Python

- Developed BudgetWise using NodeJS and ReactJS to manage monthly expenses, helping users save 10% monthly by improving spending control and enhancing web page loading speed for a smoother user experience.
- Implemented Redux and ContextAPI to **manage global state efficiently**, allowing seamless data flow and enhancing user experience for real-time expense tracking.

Technical Skills

Languages: Javascript, Python, Java, HTML, CSS, GraphQL, C++, C#, Typescript

Software Development: ReactJS, NextJS, NodeJS, Redux, Context API, FastAPI, React Native, Microservices

Tools: Jira, Git, Notion, Confluence, Supabase, Jenkins, Docker, PowerBI, Postman

Backend Infrastructure: AWS S3, ECS, Api Gateway, Redis, Kubernetes

Testing: Jest, Cypress, React testing library, Storybook

Development Practices: CI/CD, A/B Testing, Agile, TDD, State Management