Dev Shah

✉ devshahtech@gmail.com 📞 +1 (619) 379-7248 📍 Austin, TX 🔗 Portfolio ⭘ GitHub in Linkedin

PROFESSIONAL EXPERIENCE

Software Engineer, *WILDCAT DISCOVERY TECHNOLOGIES* 🔗   Jul 2024 – Nov 2024 | San Diego, United States
- Facilitated migration from legacy jQuery codebase to modern React.js and TypeScript stack **resulting in 40% of code complexity**, improving **user experience** and **code maintainability** while adhering to version control practices.
- Automated the development environment setup and build process using Docker, docker-compose, and integrated **CI/CD pipelines** through **GitHub Actions** and **Azure** which helped reduce **build-time by 70%** and minimized manual configuration errors.
- Implemented JUnit unit tests and Cypress E2E testing framework, reaching **95% coverage** and **cutting production bugs by 65%.**
- Programmed algorithms for **advanced navigation system** in TanStack table to optimize large-scale battery-cell testing protocols resulting in a reduction in data analysis time for scientists from **around 60 days to 20 days**.
- Developed low-level interfaces (e.g. RS485, Modbus) and implemented MQTT protocol to achieve **data transmission** and **real-time device monitoring** to **enhance system responsiveness**.

Full Stack Software Engineer Intern, *San Diego State University* 🔗   Jun 2024 – Dec 2024 | San Diego, United States
- Developed a full-stack web application using React.js and Node.js that leverages OpenAI's GPT-4o-mini API to automatically extract news articles about fatal encounters occurred in California, resulting in a **90% reduction** in manual **data entry time** and **data accuracy**.
- Engineered an automated data pipeline with Google Sheets API integration for **real-time data aggregation**, providing analysis across **research teams at SDSU** and processing over 100+ articles with information extraction patterns, maintaining 95% accuracy in data structuring

Software Engineer, *WEB4NEXT* 🔗   Dec 2022 – Jun 2023 | India
- Secured to 2% among 1500 participants in a hackathon by leading a team to build a Chrome Extension for a **decentralized payment system** for Web4Next. Integrated frontend and backend with React.js, Node.js, and GitLab **delivering a secure payment experience** for transactions.
- Managed Kubernetes clusters in Amazon EKS, automating cluster scaling with EC2 instances and leveraging Amazon Auto-scaling for **optimized resource allocation**, **improving application scalability** with less management overhead.
- Configured 6EC2 instances in 2 AWS Regions, with VPC and Auto-scaling to configure secure, scalable, and fault-tolerant infrastructure resulting in a **28% improvement in system uptime**.

Software Engineer Intern, *PERFECT SOFTWARE* 🔗   May 2022 – Nov 2022 | India
- Used SQL queries to sort and filter vendors based on key parameters like price, delivery time, and product availability, ensuring the selection of the cost-effective options that led to **32% reduction in procurement costs**.
- **Optimized vendor selection** for medicines by using a data-driven approach that improved the company's cost efficiency. Used a combination of PHP, JavaScript, MySQL and bootstrap to achieve this functionality.

EDUCATION

San Diego State University, *Master's in Information Technology, GPA - 3.87*   Aug 2023 – Dec 2025 | San Diego, United States
- **Coursework:** ArcGIS, Data Structure and Algorithms, Operating Systems, Computer Architecture, Multi-Threading, AWS Cloud Computing, Business Analytics, Machine Learning, Data Science with Python, Statistical Analysis

CHARUSAT University, *Bachelor of Technology in Computer Science, GPA - 3.5*   Jul 2019 – Jun 2023 | India
Served as the **1) Cultural Club Head 2) Vice-Chair, IEEE Computer Society** Coursework: System Design, Data Structures & Algorithms

SKILLS

Programming Languages: JavaScript(ES6+), Python, C, C++, HTML, CSS, PHP, Bash

Libraries/Frameworks: Swagger, Typescript, Vite, Node.js, Express.js, GraphQL, Zod, Storybook, React Query (TanStack), Figma

Tools/Software: AWS, GitHub, Kubernetes, Linux, Kafka, RabbitMQ, Graphana, Prometheus, Postman, Vercel, JIRA

Database: MySQL, NoSQL, PostgreSQL, DynamoDB | Foundations: AI, DevOps, CI/CD, Restful API, IOT

PROJECTS

Fatal Encounters Data Extractor - Web Data Extraction, *Skills: React.js, Node.js, OpenAI API GPT-4, Google Sheets API, Data Processing* 🔗
- Developed a full-stack web application using React.js and Node.js that leverages **OpenAI's LLM** to automatically extract news articles about fatal encounters, resulting in a **90% reduction** in **manual data entry time** and **data accuracy**.
- Engineered an automated data pipeline with Google Sheets API integration for real-time **data aggregation**, enabling **analysis across research teams at SDSU** and processing over **100+ articles** with consistent information extraction patterns, maintaining 95% accuracy in data structuring

Heart Disease Detection, *Skills: Python, NumPy, Pandas, Matplotlib, Seaborn, Logistic Regression, Random Forest, KNN, GridSearchCV*
- **Developed and optimized** heart disease detection model using logistic regression, random forest, KNN, and perceptron algorithms, achieving a high precision score of 95% and recall of 96% with the tuned random forest model.
- Conducted **data preprocessing** and **feature engineering** on a dataset of 1,025 patient records, using exploratory data analysis (EDA) and cross-validation to enhance model performance, resulting in a 30% improvement in F1 score compared to baseline models.

CERTIFICATES

- AWS Cloud Practitioner Certificate 🔗