# **SAINATH GANDHE**

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# **EDUCATION**

#### Master of Science in Computer Science, California State University, Fullerton

Aug 2024 - Aug 2026

• GPA: 3.9/4.0, Relevant Coursework: Artificial Intelligence, Database Management Systems, Algorithms Advance Computer Networking.

#### Bachelor of Engineering in Computer Science, The National Institute of Engineering, Mysuru

Aug 2019 - Aug 2023

• GPA: 3.5/4.0, Relevant Coursework: Operating Systems, Cloud Computing, Computer Networks, System Design, Software Engineering.

# **SKILLS**

- **Programming Languages:** Java, Python, C++, TypeScript, JavaScript, HTML5, CSS3, C#.
- Frameworks & Libraries: React, .NET, Node.js, Express.js, Spring Boot, Angular, Flask, Vite.
- Database Management: SQL, PostgreSQL, MongoDB, SQL Server.
- Software Development: RESTful APIs, Object-Oriented Programming, Testing, TDD, API Development, Root Cause Analysis, CI/CD.
- Tools & Platforms: MySQL, Microsoft Office, GitHub, JIRA, Slack, Jupyter Lab, Firebase, AWS (Lambda, EC2, S3), Azure.
- **Soft Skills:** Collaboration, Problem-Solving, Communication, Agile/Scrum Methodologies.

#### **EXPERIENCE**

#### Software Developer, BOEING

Aug 2023 - Aug 2024

- Led the Critical Parts Tracking System (CPTS) project using SpringBoot and Angular, improving the real time tracking of critical aerospace parts. By implementing robust data handling and real-time updates, system improved reporting accuracy by 25%.
- Optimized the Wireless Business Management System (WBMS) using React for the front-end, addressing bottlenecks that caused delays in wireless business operations. This effort reduced system latency by 10% and streamlined overall business workflows.
- Designed and implemented new features for CPTS, focusing on creating a user-friendly interface to access real time data. Integrated data from diverse sources like inventory databases and supplier systems, which increased accessibility for the management team.
- Coordinated with QA teams to conduct end-to-end testing and deployed updates with minimal downtime, reducing system errors by 60%.
- Worked in Agile Scrum teams to drive sprint planning and infrastructure optimization, integrating 3rd-party tools across systems.

#### **Software Developer Intern, BLOCMATRIX IT SOLUTIONS**

Feb 2023 - Jun 2023

- Designed and implemented distributed storage and query systems using AWS Lambda and DynamoDB, ensuring high availability and fault tolerance, which resulted in a 25% increase in system reliability. Collaborated with cross-functional teams to establish scalable architectures.
- Created an automated testing framework in Python with property-based testing, boosting test coverage by 30% ensuring system resilience.
- Designed RESTful APIs for microservices and participated in Agile ceremonies, leading retrospectives that improved team output by 15%.

#### Web Developer Intern, NULLCLASS

Oct 2022 - Dec 2022

- Created a cloud-based travel booking platform using React and Node.js, offering real-time booking capabilities. This system improved user retention by 20% due to enhanced functionality and a streamlined user experience.
- Designed and implemented distributed indexing mechanisms for scalable data retrieval, reducing search response times by 35%.
- Utilized property-based testing tools to identify edge-case failures, enabling robust software performance and ensuring consistency.

#### Virtual Experience Intern, DELOITTE

Aug 2022 - Sep 2022

- Automated data analysis workflows using Python and advanced scripting, achieving a 5% improvement in processing speed. Streamlined financial reporting systems to enhance accuracy and efficiency.
- Designed and deployed a distributed ledger system utilizing blockchain principles to ensure data integrity and reduce transaction errors.
- Participated in Agile project workflows, contributing to sprint reviews and planning to ensure timely delivery of high-quality solutions.

## PROJECTS AND RESEARCH PUBLICATIONS

### **Dynamic Web Application for Inventory Management**

- Engineered a full-stack inventory management application using Node.js and React that streamlined inventory tracking processes for small businesses, improving operational efficiency by 10%. Collaborated with stakeholders to define key requirements and features.
- Designed and implemented a RESTful API for managing inventory data, allowing users to perform CRUD operations easily and access info.
- Integrated user authentication and role-based access, enhancing security and ensuring that sensitive information was adequately protected.

### **Personalized Recommendation Engine for E-Commerce**

- Developed a recommendation engine using Python and collaborative filtering algorithms to deliver personalized user experiences. Integrated deep learning models for advanced predictive capabilities. Conducted extensive A/B testing to refine algorithms based on user feedback.
- Enhanced recommendation accuracy by 45% through application of GenAI models, increasing customer satisfaction and engagement rate.
- Deployed system on AWS Lambda, achieving scalable and cost-effective processing for a user base. Optimized infrastructure costs by 25%.

## **Automated Code Analysis Tool**

- Built a static code analysis tool using Python and abstract syntax trees, identifying vulnerabilities, and ensuring adherence to best coding practices in distributed systems. Partnered with development teams to refine the tool's usability and adaptability.
- Enhanced the tool's functionality with advanced type-checking features, reducing runtime errors by 40% and improving code reliability.
- Partnered with development teams to refine the tool's usability and adaptability, driving adoption and culture of proactive code quality.

<u>Stock Price Prediction using Machine Learning – An Unprecedented Approach</u> - Applied LSTM and CNN to predict stock price movements.

<u>G – Notify – A Personalized Mass Emailer</u> - Developed a scalable mass mailing system.