SAWAN CHAKRABORTY

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EDUCATION

Master's in Computer Science & Engineering (MS CS)   April 2023 - March 2025
Santa Clara University — GPA: 3.9/4.0   *Santa Clara, California*

Bachelor's in Computer Science & Engineering (BS CS)   August 2017 - June 2021
Visvesvaraya Technological University — GPA: 4.0/4.0   *Bangalore, India*

TECHNICAL SKILLS

Languages	Java, Python, JavaScript, C++, Shell Scripting, Android
Web Technologies	HTML5, CSS3, Bootstrap, React, JSON, REST APIs, SOAP APIs, NodeJS, Flask, Streamlit
Databases	MySQL, SQLite, MongoDB, Redis, Hadoop, Firebase, Spark
Tools & Platforms	Git, Maven, Jenkins, JIRA, CI/CD, Spring, Splunk, Docker, Kubernetes, Kafka, Linux, JUnit, Selenium

EXPERIENCE

Frugal Innovation Hub   March 2025 - Present
Software Engineer | Node.js, JavaScript, TypeScript, Git, Kotlin, Docker, Android   *Santa Clara, CA*
- Developed 'Equation2Success' anti-bullying app using Android, boosting user engagement by 30% with a user-friendly interface and ticketing system. Implemented SSO integration via OAuth 2.0, increasing app adoption by 25%.

Caltrain   June 2024 - January 2025
Software Engineering Intern | Python, Tableau, Power BI, Wireshark, Git, Nmap, Agile   *San Carlos, CA*
- Led the enhancement of Positive Train Control (PTC) technology, improving system efficiency by 25% and reliability by 30%, while contributing to Caltrain ITCM High-Level Project Design within legal requirements.
- Worked with the cybersecurity team, using Wireshark, Nmap, and Python to analyze TCP dump data, automating detection of affected ports and protocols, reducing analysis time by 40% for over 50 stakeholders.

Accenture   July 2021 - February 2023
Software Development Engineer | Java, JDBC, REST API, Spring, MySQL, Maven, Git   *Bangalore, India*
- Developed and deployed RESTful APIs using Java, automating 70% of tasks and enhancing Dyson Europe's UX, improving performance by 50%. Conducted automated tests and QA checks, increasing quality by 25% and reducing issues by 40%.
- Integrated data quality checks against SQL Injection and cross-scripting, managing 200+ data sources, enhancing data integrity by 90%. Overall efforts improved efficiency and user ratings for 400,000 users, fostering business growth.

Kigyan Techno Solutions   March 2021 - May 2021
Software Engineering Intern | Android, Firebase, REST API, SQLite, Splunk   *Bangalore, India*
- Launched "Retail Promotion Planning" module with video streaming on Android, increasing user engagement by 50% and attracting 10000 new users in 3 months. Optimized code by analyzing app logs which reduced crashes by 40%.

ACADEMIC PROJECTS

AI-Powered Git Commit Reviewer | *Python, OpenAI API, Git Hooks, Slack, Docker, Kubernetes*
- Built an AI-integrated pre-commit system to review code diffs, suggest commit messages, provide test and security feedback, and enforce quality via soft and strict modes. Automated Slack and email notifications and deployed via Dockerized microservices on Kubernetes, improving commit consistency by 80% and developer efficiency by 75%.

COVID-19 Live Tracker Dashboard | *Java, REST API, HTML5, CSS, JavaScript, Bootstrap, AWS*
- Created real-time COVID-19 Live Tracker Dashboard, utilizing Java, REST API, HTML5, CSS and Bootstrap, attracting 100+ monthly users. Deployed the full-stack app on AWS to handle traffic spikes during peak pandemic periods.

ParkShare – Optimize & Earn from Your Parking Spot | *Java, Android, REST API, Firebase, SQLite*
- Built an Android-based Uber for parking platform enabling users to find nearby slots and providers to rent unused spaces, reducing search time by 50% for 70+ users. Integrated Firebase for backend APIs.

AI Job Recommendation System | *React, Python FastAPI, Java Spring Boot, PostgreSQL, AWS S3*
- Developed a full-stack job portal providing AI-powered job recommendations, improving match accuracy by 70% for 100+ users, with resume parsing, skill and location filters, and scalable storage using PostgreSQL and AWS S3.

ACHIEVEMENTS & AWARDS

- Conceptualized and published 3 Android apps on the Google Play Store.
- Winner of Karnataka State Council(IISc) sponsorship for "COVID-19 Face Mask Detector" project.