Sidharth Agarwal

Software Engineer

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Summary

Full-stack Software Engineer with 2 years of experience building enterprise-grade systems across healthcare, automotive manufacturing, and government sectors. Proficient in React, Node.js, Python, and cloud platforms, with a strong track record of delivering scalable solutions — from ML-powered data pipelines processing 100K+ records to multi-tenant ERP systems serving Fortune 500 clients. Experienced in end-to-end product development with a focus on performance, security, and measurable business impact.

Technologies

Languages: C++ (Data Structures and Algorithms), Python, JavaScript, SQL

ML & Data Science: Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, Plotly, Statistics & Probability, Hypothesis Testing

Deep Learning: Neural Networks, CNNs, RNNs, Transformers

Frontend: HTML, CSS, Tailwind, ShadCN, React, Redux

Backend: NodeJS, Express, Flask, REST APIs, JWT

Databases: MySQL, PostgreSQL, MongoDB, Firebase, Snowflake

Experience

Software Engineer, ADA Digital Analytics Private Limited - Bengaluru, India   July 2024 - Present

Client 1: Ascend Solutions

- Developed ML-powered data quality monitoring system processing 100K+ healthcare records, using Isolation Forest and statistical methods to identify 500+ data inconsistencies, improving data accuracy by 28% while maintaining HIPAA compliance
- Architected secure multi-tenant authentication system with JWT-based token management, granular RBAC permissions across 8+ user roles, OAuth 2.0 integration, and encrypted session storage, ensuring HIPAA compliance and data integrity across healthcare microservices
- Established comprehensive testing framework achieving 80% code coverage with automated CI/CD pipelines on Azure, enabling zero-downtime deployments for production healthcare systems

Client 2: Mitsui Japan

- Architected enterprise manufacturing management system for Fortune 500 automotive supply chain (Mitsui Steel, Perodua, Toyota Malaysia), managing multi-million dollar purchase orders and production workflows serving 500+ users across 25+ application routes
- Built advanced file processing engine handling 10,000+ row Excel/CSV files with merged cell detection, style preservation, and real-time HTML preview using ExcelJS and custom parsers, reducing manual data entry by 85%
- Developed production forecasting module with ML-based difference detection comparing previous vs latest production plans across 15+ vehicle models and production months, automatically identifying discrepancies for approval workflows
- Engineered complete delivery management system with vessel tracking, ETD/ETA monitoring, multi-document handling (B/L, invoices, packing lists), and O/S reconciliation workflows, reducing processing time by 60%
- Designed scalable React SPA with Redux state management, 15+ reusable components, Microsoft Entra ID authentication with auto-refresh tokens, and optimized API integration with Power Automate backend services

SDE Intern, Decathlon - Bengaluru, India   August 2023 - October 2023

- Led implementation of 10+ A/B tests using VWO, driving 25% increase in user engagement through data-driven UX improvements and statistical analysis
- Developed comprehensive technical documentation covering system architecture, API integrations, and component library
- Collaborated with UX team to optimize website performance, reducing load time by 30%

Education

Meerut Institute of Engineering and Technology - September 2020 - June 2024   CGPA : 7:63

- B.Tech in Computer Science and Engineering (Artificial Intelligence and Machine Learning)
- **Coursework:** Database Management System, Theory of Automata and Formal Language, Operating System, Computer Networks, Design and Analysis of Algorithm, Computer Architecture

Professional Projects

Full Stack Developer, Consulting Work   Aug 2023 - Present

- **Learning Management System** - *Educational Institution*
    - Developed complete academic workflow management including student enrollment, timetable generation with conflict detection
    - Built role-based access for Admin, Faculty, and Students with real-time attendance tracking and automated grade calculation
    - Reduced administrative workload by 60% and improved data accuracy through centralized database with validation
- **Flextiles ERP System** - *Print Manufacturing Company*
    - Created end-to-end ERP managing 15+ production processes (letterpress, foil stamping, embossing, die-cutting)
    - Implemented dynamic billing with automated cost calculations, CRM pipeline, and production stage tracking
    - Reduced estimate creation time from 2+ hours to 15 minutes with 80% accuracy improvement in pricing

Certifications

- **Data Engineer Certification** - Snowflake (2025)
- **SnowPro Core Certification** - Snowflake (2025)
- **Full Stack Web Development** - 100xDevs (2024)
- **Data Structures and Algorithms in C++** - Coding Ninjas (2022)
- **Foundation in C++** - Coding Ninjas (2021)