

Siddharth Chillale

sidcp.work@gmail.com | www.linkedin.com/in/schillal | +91-85548-31799 | Satara, Maharashtra

EDUCATION

Master of Science in Computer Science

University at Buffalo, The State University of New York,

Coursework - Operating Systems, Distributed Systems, Analysis of Algorithms, Modern Networking Systems, Database Systems.

Graduated: 2023

Buffalo, NY

Bachelor of Technology in Computer Science

Indian Institute of Information Technology, Tiruchirappalli (IIIT)

Coursework - Database Management Systems, Design and analysis of Parallel algorithms, Computer Architecture, Principles of compiler design, Linear Algebra.

Graduated: 2021

Trichy, India

TECHNICAL SKILLS

Technology stack : JavaScript(Node.js), C/ C++, SQL, PostgreSQL, Express, HTMX, React, Go

Software Tools : Linux, Docker, Kubernetes, Nginx, Apache, Git, Github, MySQL, GNU Debugger, AWS(S3, Lambda, EC2)

Concepts : Distributed systems, REST, OAuth, JWT, RDBMS, Machine Learning Models, Data Visualisation, Networking

Certifications

- **AWS Cloud Practitioner**, Amazon - Certificate Id - Q4B80MS2V1VE14S9

07/2023 - 07/2026

PROJECTS

Team Assignment Allocation Platform [Node, PostgreSQL, HTMX, AWS]

08/2024 - 12/2024

- **Developed a full-stack web application** with secure APIs, JWT authentication, and role-based access control, enabling efficient team and project management for academic and professional use.
- **Containerized the application** using Docker and orchestrated services with Docker Compose, ensuring portability and simplified deployment on a Raspberry Pi machine and AWS EC2.
- **Automated CI/CD workflows with GitHub Actions**, building and pushing Docker images to Docker Hub and AWS ECR, seamlessly deploying to an AWS architecture that integrates EC2, RDS, and S3 for a scalable and resilient solution.
- Implemented **Test-Driven Development (TDD)** and used task management tools to maintain high code quality and iterative progress, delivering a robust and maintainable solution.

Relational Database Engine (Taco-DB) [C++, gdb, Linux] under Dr. Zhuoyue Zhao

02/2022 - 05/2022

- **Engineered standard database operations** including joins, aggregations, caching, and indexing with B-Trees to optimize performance and data retrieval efficiency.
- **Developed and validated database systems** for storage management, query processing, and optimization by implementing RDBMS features in a Test driven development environment using Google Test.

EXPERIENCE

Backend Developer, University at Buffalo [NodeJS, Express, MySQL] under Prof. Alan Hunt

09/2022 - 02/2023

- **Engineered core and server-side components** of a Project Management System app, working closely with the user interface team and customers in an Agile development environment. Spearheaded the application development to solve a professional problem.
- **Managed weekly issue tracking, source version control** on GitHub and deployment of the application to an on-premise Apache Web Server.
- **Developed multiple software systems** that met strict software requirements, accelerating delivery through adherence to Agile SDLC practices and timely execution.
- **Developed and deployed 20+ REST APIs**, enhanced existing ones, debugged issues, and documented changes (Swagger), leveraging JavaScript and SQL to deliver new features with prompt delivery.
- **Conducted 25+ code reviews and managed 20+ pull request merges** on GitHub, ensuring stability and reliability in the codebase.
- **Managed a junior team of 4** by streamlining the software development process, project onboarding, implementing best practices, conducting code reviews, and ensuring adherence to quality standards throughout project lifecycles.

Data Management Analyst (Financial), CodersData LLC, Remote [Python, MS Excel, Power BI]

03/2023 - 07/2024

- **Executed comprehensive data analysis** on customer behavior and sales trends, leading to the identification of key market segments and contributing to a 15% increase in targeted marketing campaign effectiveness.
- **Developed interactive dashboards** using **Power BI** and **Python**, which improved data accessibility and visualization, resulting in a significant reduction in decision-making time for senior management.
- **Automated data reporting processes** through scripting and ETL tools, reducing manual report generation time by 40% and increasing overall operational efficiency.
- **Conducted predictive analytics** to forecast sales and inventory needs, optimizing stock levels and reducing excess inventory by 25%, which enhanced cost savings and revenue growth.