Anand Sagar

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Linkedin ⬈ | **GitHub** ⬈ | **GeeksForGeeks** ⬈ | **LeetCode** ⬈

Education

KLE TECHNOLOGICAL UNIVERSITY   Hubballi, Karnataka
B.E. Computer Science and Engineering   2020 - 2024
CGPA: 9.26

Mount Assisi School   Bhagalpur, Bihar
Higher Secondary (**ISC**)   2017 - 2019
Percentage: 86.40%

Mount Assisi School   Bhagalpur, Bihar
Secondary (**ICSE**)   2017
Percentage: 90.83%

Experience

Amazon Web Services | Cloud Support Associate (RDS MySQL)   Bengaluru | July 2024 - Present

- Collaborated closely with **AWS strategic customers** to troubleshoot complex database-related issues and provide tailored recommendations and best practices for optimal performance and reliability.
- Worked extensively with **RDS MySQL** and **Aurora MySQL**, addressing a wide range of customer concerns from basic configuration to advanced performance tuning and high availability setups.
- Provided comprehensive **Query Optimization** services to significantly improve database performance and reduce resource consumption.
  - Analyzed and restructured complex SQL queries, resulting in substantial improvements in query execution time and overall system efficiency.
  - Implemented advanced indexing strategies to enhance query performance, considering factors such as cardinality, selectivity, and query patterns.
- Worked extensively on resolving customer issues related to **parameter optimization** on **InnoDB**, improving database performance and stability in various customer environments.
- Developed a deep understanding of **internal MySQL and InnoDB architecture**, particularly how it maintains **Atomicity, Consistency, Isolation, and Durability (ACID)**, enabling more effective troubleshooting and optimization.
- Optimized database performance variables and configuration settings to maximize efficiency and throughput in high-load environments, tailoring solutions to specific customer needs and workloads.
- Assisted customers in **database capacity planning** and **scalability solutions**, ensuring their systems could handle growing data volumes and increasing user loads effectively.
- Designed and implemented robust **database backup and recovery strategies**, ensuring data integrity and minimizing potential downtime in critical systems.
- Provided expert guidance on **best practices** for database management, including security measures, performance monitoring, and proactive maintenance procedures.

Projects

Advanced Face Recognition System ⬈

- **Winner of the Police Hackathon** among 3000+ Registrations, Organized by Karnataka State Police, Microsoft, and Intel at IIIT Bangalore
- Implemented an **ML model for advanced face recognition** that can identify individuals even when 70-80% of their face is covered or when they are wearing masks
- Applied **data augmentation** techniques using the **GAN algorithm** to generate varied versions of the same person
- Developed a system for **identifying individuals and tracking their movement** from CCTV footage
- Developed a user interface using **React** for the project.

Vehicle to Infrastructure (V2I)-Simulator ⌕
- Built a simulator to **test and analyze different algorithms** on V2I architecture using the pygame library
- Designed an algorithm which **reduced average waiting time of vehicles in traffic by 14% and carbon emission by 15%**
- Used Operating System concepts such as **multithreading** to make the simulator fast

Covid-19-Vaccination-Analysis ⌕
- Analysed the effect of different vaccines in different region of world
- Compared the Vaccination rate as well as vaccination choice in developed / developing and under developed region
- Predicting daily count of vaccines in a given region on a given date using **stacked LSTM** model

SKILLS

- **Languages**: C, C++ (**Proficient**), Python
- **Core Subjects**: Data Structures and Algorithms (DSA), Object Oriented Programming (OOP), Operating Systems, Computer Networks, Data Base Management System (DBMS), Machine Learning
- **Cloud Computing**: Amazon Web Services (AWS), Kubernetes, Docker
- **Tools**: Git, GitHub, VS Code, Cisco Packet Tracer
- **Databases**: MySQL, DynamoDB
- **Interpersonal Skills**: Problem-solving, Leadership, Team Work, Conflict Resolution, Adaptability, Active Listening

POSITION OF RESPONSIBILITY

Head at Wecode Community   March 2021 - Present
- **Led the WeCode Community:** Successfully managed and engaged a community of over 1000 members, fostering alumni interaction and collaboration
- **Initiative and Leadership:** Spearheaded the WeCode initiative, enhancing alumni relations and creating a robust network for professional development and support

Microsoft Learn Student Ambassador   October 2022 - July 2024
- Organized and led workshops on various **Computer Science subjects** for students.
- Mentored and supported fellow students in their learning journeys.

Geeks for Geeks Chapter Lead   May 2021 - July 2024
- Organized **coding contests** to promote coding skills and problem-solving abilities among students.
- Conducted workshops and tutorials on **OS, CN, DBMS**.
- Mentored students and provided guidance on technical concepts.

CERTIFICATIONS

- Amazon Web Services Certified Solution Architect Associate **(SAA-C03)** ⌕
- Juniper Networks Certified Internet Associate **(JNCIA-Junos)** ⌕
- Cisco Networking Academy - Computer Networking Essentials ⌕
- Linux Essentials by Cisco Networking Academy ⌕
- Version control with Git and Github ⌕

HONORS & AWARDS

- **Best outgoing student** of Engineering stream (2024 batch) of KLE Technological University
- Selected among 300 students nationwide for **Amazon Machine Learning Summer School**
- Selected among top 100 AI researchers nationwide for **IIIT Hyderabad Summer School on AI**
- National-level winner of the **Mercedes Benz Techflame Hackathon**
- National-level winner of the **Police Hackathon** organized by Microsoft Azure and Intel, out of 3000 teams
- **All India Rank 120** and Global rank 1297 out of 28000 candidate in **Facebook HackerCup**