SIDDHARTH AGARWAL

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EDUCATION

International Institute of Information Technology - Hyderabad — 9.01 CGPA   2022 – 2026
B.Tech.: Computer Science Engineering

Pace Junior Science College — 89.83%   2022
Class XII: HSC Board (Maharashtra)

Gokuldham High School — 98.5%   2020
Class X: Indian Certificate of Secondary Education

Experience

Oracle [OCI (Oracle Cloud) Intern]   May. 2025- July 2025
- Developed an API to evaluate OCI Sign-On policy configurations, providing detailed insights into matched policies, matched/ unmatched rules, and break-glass scenarios.
- Improved administrator confidence and reduced support tickets by enabling detection of any policy misconfigurations.

Perceptive Analytics Pvt Ltd. [Language Input Development Intern]   Feb. 2024- July 2024
- Created front-end and back-end of a Chrome extension to auto-complete Telegu sentences written by the users in the browser.
- Javascript based front-end to monitor user input and display model output.

Relevant Coursework

- Data Structures and Algorithms
- Introduction to Information Security
- Software Programming for Performance
- Distributed Systems
- Computer Systems Organization
- Operating Systems and Networks
- Probability and Statistics
- Computer Vision
- Data and Applications
- Statistical Methods in AI
- Computer Graphics
- Digital Image Processing

PROJECTS

Onion Routing Network
- Developed a Tor-inspired network with multiple encryptions, randomized path selection, traffic analysis resistance using random packet padding, session management and adaptive load balancing.
- Achieved 25% lower response time with adaptive load balancing and secured communication using RSA-4096 and AES-256 encryption

Network File Server
- Built a distributed network file system in C with a naming server, multiple storage servers, and client interfaces.
- Contributed to functionalities like redundancy, concurrent client access through multi-threading, error handling, efficient server-side search, and client-side file and directory operations such as reading, writing, creating, deleting and copying.

C Shell
- Implemented a Linux shell in C from scratch, incorporating features such as fetching man pages, piping, I/O redirection,command history, handling foreground/background processes, and interrupts.

Strife – Payment Gateway Simulation
- Built a gRPC-based distributed payment system interfacing clients with multiple bank servers, implemented in Go.
- Implemented TLS-based authentication, role-based authorization, idempotent transactions, offline queued payments, and atomic cross-bank transfers with 2PC + timeout handling.

BaseMLib
- A foundational library implementing classical and deep learning algorithms from scratch, including MLPs, KNN, GMMs .

SKILLS

Languages: C, C++, Python, Go, Java, x86 Assembly, Javascript, HTML/CSS

Backend: REST, Threading , OpenMP, gRPC, Sockets, SQLite, MariaDB, Flask

Tools: Linux, Git, Github, Bash, CMake

ACHIEVEMENTS

- JEE Advanced Rank: AIR 997
- JEE Mains: 99.87 percentile (AIR 1215)
- Megathon: Led the team to secure a spot at the finals of Hyderabad's largest state-level hackathon.