Harsh

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EDUCATION

IIIT HYDERABAD
B.Tech in Computer Science and Engineering
2017-2021 | Hyderabad, India
CGPA: 8.97 / 10

ST. KAREN'S
Senior Secondary, CBSE
2007-2017 | Patna, India
Percentage: 94.2

LINKS

Github:// **h-sinha**
LinkedIn:// **harsh26**
Codeforces:// **coder_h**
Hackerearth:// **harsh748**
Atcoder:// **coder_h**
Leetcode:// **coder_h**

COURSEWORK

Operating Systems
Distributed Systems
Data Systems
Computer Networks
Software Architecture
Data Structures and Algorithms
Complexity and Advanced Algorithms
Statistical Methods in AI
Optimization methods
Information Retrieval and Extraction
Artificial Intelligence
Discrete Mathematics
Probability Theory
Complex Analysis
Linear Algebra
Group Theory
Teaching Assistant
Computer Programming

TECHNICAL SKILLS

Day to Day:
C++ • Shell • Python • Git
Familiar:
AWS • Docker • Spring Boot • Java • React • Golang • Matlab • MySQL • Flask • Laravel

EXPERIENCE

STEALTH STARTUP | Software Engineering Intern
May 2020 – July 2020 | Remote
Worked remotely for a Silicon Valley based stealth startup, which is disrupting $1.8 trillion legacy market.

- Set up automated documentation generation service and developed an interface for live testing backend APIs which made using these APIs easier.
- Improved system reliability by setting up system-wide monitoring and alert service on AWS using Prometheus.
- Technologies used: Spring Boot (Java), Swagger, Protobuf, Prometheus, Grafana, AWS, Docker.

Note - Summer 2020 internship offer at Facebook London rescinded due to COVID-19.

PAYMATRIX | Software Engineering Intern
August 2018 – November 2018 | Hyderabad, India

- Developed a system for rent payment and administration of multiple properties.
- Technologies used: Laravel (PHP), Vue (Javascript), MySQL and REST APIs.

ACHIEVEMENTS

2020	Ranked 209	Google Kickstart *(Consistently ranked under 500 since 2017)*
2019	Ranked 510	Facebook Hackercup Round 2
2019	Ranked 5	Increff CodeRunner
2018	Qualified for regionals	ACM-ICPC-2018
2018	Ranked 455	Facebook Hackercup Round 2

PROJECTS

WIKIPEDIA SEARCH ENGINE
An efficient and scalable Wikipedia search engine built using **Python**, which creates inverted index of a given wikipedia dump, queries on the index and retrieves top 10 results via relevance ranking of the documents.

LINUX SHELL
A custom terminal shell coded in **C++** based on the POSIX architecture with integrated syscalls. All common shell commands are natively supported with syscalls used for less commonly used commands.

RELATIONAL DATABASE MANAGEMENT SYSTEM
A custom DBMS written in **C++** which supports common SQL commands. It supports indexing using B+ Tree and Linear Hashing, and other optimizations for running queries efficiently.

GREP USING MAPREDUCE
A distributed string matching algorithm implemented using **Hadoop** in **Java**. The algorithm efficiently works on extensive datasets.

DASHFEED
A news aggregator made with **Python** and **Flask** framework. It extracts news from websites like BBC, Economic Times, ESPN, Fox News, Huffington Post, Reuters. The portal has basic features like user authentication, comment, article publishing.