





K VAMSHI KRISHNA REDDY

Final-Year Undergraduate | Computer Science Engineering | IIT Hyderabad

Gender: Male
DOB: 30 March 2001

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EDUCATION

Indian Institute of Technology Hyderabad

2018 - Exp. 2021

- > Final-year B.Tech student with major in **Computer Science Engineering**.
- > **CGPA:** 8.59 / 10 (till 7th Sem)
- > **JEE Advanced:** AIR 675, **JEE Mains:** AIR 1380

WORK EXPERIENCE

SDE Intern | Microsoft

 [Completion Certificate](#) May - Jul 2021

- > Created end to end support to an existing website with 3 tier architecture of UI, Rest services, and DB
 - > Used C(ASPNET) for accessing Cosmos DB, creating REST services and Web API
 - > Used js, ts, and react for integrating the Backend support in the existing project repo
 - > Created a bot in qnamaker website, which uses a QnA knowledgebase as a reference and provides appropriate answers
- Worked as Teaching Assistant for 2 courses | Intro to Programming and Intro to Data Structures** Jan'20- Feb'21
- > Got a good experience in clearing doubts, evaluating, debugging, and testing codes of other people

PROJECTS

Chat application with socket programming

Dec'20

Created a chat room in python using socket library, where multiple clients connect to a single server and chat in real-time; Handles both ipv4 and ipv6 addresses

Chat application with TLS security

March'21

Created an end-to-end peer-to-peer chat application using lxc containers, encrypted using python SSL library. Simulated Downgrade and MITM attacks over the chat application by DNS spoofing

Simulation of Musical Chairs

Feb'20

Handled Thread synchronization using synchronization primitives like locks, mutex, conditional variables. This gave me an exposure to multi-threaded programs, synchronisation.

Relational Database for IMDB dataset

April'21

Designed a flexible relational database for movies, series, and episodes using PostgreSQL. Designed a flexible ER diagram that adapts easily for changes in requirements.

Firewall simulation

April'21

Simulated a blacklisting firewall using RAW socket programming, tested the simulation using CLI iperf tool. Created firewall rules considering many fields like protocol type, (src and dest) IP addresses, subnets, port no.s. Created a CLI interface to dynamically update the firewall rules.

RELEVANT COURSES

- > **Computer Science:** Algorithms, Data Structures, Operating Systems, Data Base Management Systems, Principles of Programming Languages, Compilers, Computer Architecture, Networks, Network Security.
- > **Machine Learning and Mathematics:** Foundations of Machine learning, Discrete Mathematics, Probability and Random Variables, Calculus, Linear Algebra.

SKILLS

Languages C, C++, Python, PostgreSQL, Basic Frontend (HTML, CSS, JavaScript, Typescript, Reactjs(Basics))

Tools Git, \LaTeX , UNIX

Competitive Programming Codeforces handle : [kvkr_2001](#), codechef handle : [kvkr_3003](#)

ACHIEVEMENTS

- > Secured AIR 675 in IIT-JEE Advance 2018
- > Secured AIR 1380 in IIT-JEE Mains 2018
- > Cleared KVPY exam both level 1 and interview 2017
- > Achieved rank **690** in **Codeforces** Educational contest - Round 111 2021
- > Achieved rank **687** in **Codeforces** division 3 contest - Round 760 2021

EXTRACURRICULAR ACTIVITIES

- > Participated in **Inter-IIT sportsmeet**.
I was selected in **chess** for the yearly Inter-IIT sportsmeet and played for the IITH team. 2020
- > **Organised an event** Proquest (algorithmic contest) for our college' techno-cultural fest **ELAN-2K20** 2020
- > **Won gold in chess** for our hostel block for the yearly GC(general championship) of our institute 2020