Rohan Asokan

EDUCATION

IIIT HYDERABAD

B.Tech in Computer Science and Engineering (Hons.)

Expected Graduation: May 2023 Cumulative GPA: 8.51 Semester GPA: 9.82

BRIGHT RIDERS SCHOOL

SENIOR SECONDARY SCHOOL Grad. May 2019 | Abu Dhabi, UAE Percent Grade: 96.6%

SECONDARY SCHOOL

Grad. May 2017 | Abu Dhabi, UAE GPA: 10

ACHIEVEMENTS

KDE Akademy '21 Speaker

Top 3 CTF'er in college

TEDxYouth Speaker

KVPY Fellowship Recipient

2nd **School topper** in CBSE grade 12 **99**th **percentile** in SAT

2400/2400 in SAT subject tests.

SKILLS

PROGRAMMING

Advanced:

Python • Javascript • React.js

GLSL • HTML • React-Native

Django • Flask Heroku • CI • CD

Intermediate:

C • C++ • CSS • Node.js • Assembly

ML • Pytorch • Image Processing

MongoDB • PostgreSQL • Shell

Tensorflow • Numba • SocketIO

Multi-threading & processing • Agile

REST • TypeScript • Continous Release

Can understand other languages and large codebases quickly

OPERATING SYSTEMS

Manjaro Linux 💛 | Kali Linux

CLUBS & VOLUNTEER

Marketing, Event Coordinator @ ERC Events Coordinator @ Club Rise AD Media Head @ Club Rise AD Member of Hacking Club

COURSEWORK

Design, Analysis of Software Systems Computer System organization Operating Systems and Networks Data and Applications Machine Learning Computer Graphics Probability and Statistics Introduction to IOT

EXPERIENCE

PICSNIFF | FULLSTACK FREELANCE - MACHINE LEARNING

Aug 2021 - Present | Remote

- Construction of software architecture, using **SDLC Principles**, leading a team of two.
- Parallel photography culling on Electron.js frontend and Flask backend including image processing and PyTorch for machine learning for user behaviour learning.

CVIT@ IIITH | UNDERGRADUATE RESEARCH FELLOW

May 2021 - Present | India

- Working under Prof. PJ Narayanan, researching the area of computer graphics.
- Innovating solutions to problems and testing them using **Compute Clusters**.

GROCIPE | FULL-STACK DEVELOPER @ SEED STARTUP

Feb 2021 - Aug 2021 | India

- Working as the **primary software developer** in a core team of designers.
- Responsibilities include **Work estimation**, **Development Scheduling**, creating **admin apps** (React), **mobile app** (React-native), **back-end** (Node.js) as well as **hosting** and management of overall software architecture.

KALK. KDE | Season of KDE (Open-source)

Jan 2021 – April 2021 | Remote

- Selected for working with Kalk (written in C++ and Kirigami Framework) as one of the 22 developers worldwide.
- Ported the fixed precision arithmetic back-end to an arbitrary precision back-end to avoid overflow and provide more accurate results using **KNumber** API.
- Using Flex, Bison and primitive regex for parsing and lexical analysis, implemented a binary calculation and conversion mode along with scientific functions.
- Demonstrated UI prototypes for a Date Calculator and **documented** my work.

UNALOME FOUNDATION | BACKEND ENGINEER

Jul 2020 - Oct 2020 | Remote

- Worked with a diverse team in creating an anonymous chat application for people to get help from mental health professionals easier and with more privacy.
- Created multiple forms using the **Django Framework** and converted the app the Django native app to have a **API-Frontend architecture**.
- Executed efficient Continuous Integration between the project Github repository and Heroku (app hosting platform) for staging builds.

PROJECTS

TELEGRAM BOTS | PYTHON, WIT.AI, POSTGRESQL, APIS, AIOGRAM, GPT3

Birthed multiple **asynchronous** telegram bots - AG_bot (a feature-packed group management bot), the Fake Curie (A GPT3 powered conversational bot), Tifa (Intent recognizing weather bot powered by wit.ai).

AGSH - C SHELL | C LANGUAGE

Developed a designer **Unix Shell** with support for over 23 common commands.

BRICKUP | PYTHON

Redesigned Brick Breaker as a terminal game based on **OOPS** principles.

TRANSLATEX | REACT.JS, NODE.JS, OPENAI GPT3 BETA

Led a duo to create an app to convert Text to LaTEX and explain it using GPT3.

XV6 OS PROCESS SCHEDULING | C LANGUAGE

Added **process scheduling algorithms** (RR, MLFQ, FCFS, PBS) to a fork of the MIT's xv6 OS and compared their efficiencies on benchmark programs.

FTP SERVER-CLIENT | C++, SOCKETS

Devised a fast file transfer CLI integrated with a high-level sockets API.

AMONGUS BUT IT'S A MAZE | C++, OPENGL, GLSL

Designed simple Maze Chaser game with AmongUs themed characters and item drops with the Chaser pathfinding to the player using **Breadth first search**.