Aryan Jain

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EXPERIENCE

EBOOK TRANSLATER & READER | Website Developer
Jan 2021 - Apr 2021 | Products Lab of IIIT Hyderabad

- A MERN webapp co-built by me with my team mates in collaboration with Products Lab of IIIT Hyderabad, that can translate an uploaded english book pdf to hindi/telugu language.
- Hosted Website:-
  eBook Translater & Reader

EDUCATION

IIIT HYDERABAD
B.Tech. in Computer Science
2019 - 2023 | Hyderabad, India
CGPA: 8.32 / 10.0

COURSEWORK

- Data Structures & Algorithms •OS & Networks •Machine Data & Learning
- Design and Analysis of Software Systems
- Database Management & Applications
- Computer Graphics •Linear Algebra
- Automata Theory •Probability & Statistics

PROGRAMMING

LANGUAGES
- C •C++ •Python
- Javascript •HTML/CSS •Bash

FRAMEWORKS
- Node •React •Express
- Bootstrap •Pygame

MISCELLANEOUS
- MySQL •MongoDb •Git
- OpenGL •Three.js(WebGL) •Latex

ADDITIONAL SKILLS

- OOPS •AGILE •Modular Coding
- Graphics Programming •Web Dev

INTERESTS

Competitive Programming interests me the most. I have reached a maximum of 1511 ratings on Codeforces(solved 750+ problems too) and 1715 on CodeChef. I keep taking part in Programming Contests.
Codeforces: **Rockarya_ IIITH**
CodeChef: **rockarya_iiith**

SELECTED PROJECTS

BRICK BREAKER GAME | Feb 2021 - Mar 2021 | Python
Built an arcade terminal-based game(similar to classic brick breaker), following *Object-Oriented Programming(OOP)* concepts. Used classes and objects to write good and modular code, henceforth it is extensible to new features.

MACHINE LEARNING ALGORITHMS | Spring 2021 | Python
Implementation of various machine learning algorithms and concepts including *Genetic Algorithm*, *Linear-Regression & Analysis of Bias-Variance trade-off*, *Value Iteration Algorithm & Linear Programming*, and *POMDPs & SARSOP*.

COACHING DATABASE | Sep 2020 - Oct 2020 | MySQL, Python
Created a Database Management System, with my team-mates for Coaching Industry using MySQL and built a CLI using Python PyMySQL. The CLI covers all *CRUD* operations along-with special query fxns like min/max/sex-ratio etc.

C SHELL | Aug 2020 - Sep 2020 | C
Used syscalls to create a *CLI* interface based on the Unix Bash Shell, which supports multiple commands per line, chained redirection, piping, signaling etc. Also it can create and manage new processes. The shell is able to create a process out of a system program like emacs, vi or any user-defined executable.

MODIFIED-XV6 | Oct 2020 | C
Tweaked the xv6 OS and added few system and user calls along-with implementing 3 new scheduling algorithms: *FCFS*(First Come First Serve), *PBS*(Priority Based Scheduling) and *MLFQ*(Multi-Level Feedback Queue).

CONCURRENCY | Oct 2020 | C
Used concepts of Multi-Threading, Mutex locks, Semaphores and Process Synchronization to implement the concurrent simulation of 2 real life systems: Event Management and Vaccine Production & Distribution.

JOB APPLICATION PORTAL | Jan 2021 | React,MongoDB,Node,Express
Developed a web application following *REST* principles based on *MERN* stack - where users have the option to apply for various job profiles while showcasing their skillset, and the recruiters from various companies have the ability to create job listings based on their requirements for various skill sets,experiences.

SKY FORCE DASH | April 2021 | Three.js
Used *Three.js* library to design an interactive game inspired from the game Sky Force, where the player plane has missiles to shoot the enemy plane and collect diamonds to increase health and achieve high score.

AMONG US | Mar 2021 | C
Built a game inspired from Among Us, using the *OpenGl* application programming interface, where the crewmate(player) needs to take the power-up button and subsequently take all the power-ups, meanwhile saving itself from the impostor(enemy) and reach the exit before time ends. The maze is created randomly on every game start.

RIVER CROSSING | Feb 2020 | Python
Used *Pygame* library to create a 2-player game, where a player at a time crosses the river, tackling all the hurdles on his way(like ships/whales/danger zone) and increasing score according to distance traversed. The other player starts from the other side of the river, after player1 dies, and wins if he scores more.

ACHIEVEMENTS

2021	Qualified Google's Code Jam Qualification round
2020	Qualified Facebook HackerCup Qualification round
2019	**Jee Mains AIR-841**
2019	**Jee Advanced AIR-2112**
2018	**KVPY**(Kishore Vaigyanik Protsahan Yojana) Scholar(12th SX stream)
2016	Qualified **NTSE**(National Talent Search Examination) Stage-1