Ganesh Aggarwal

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GaneshAggarwal | ganesh1085

EDUCATIONAL QUALIFICATIONS

Year	Qualification	Institution	Performance
2019-2023	B.Tech in Computer Science Engineering	Indian Institute of Technology, Ropar	**8.32**/10.0
2019	Class XII (CBSE)	Salwan Public School, New Delhi	**95.6%**
2017	Class X (CBSE)	Salwan Public School, New Delhi	**10.0**/10.0

WORK EXPERIENCE

Microsoft | *Software Engineer* *July 2023 - Present | Hyderabad, India*

- Tech stack: Java, Kotlin
- Working in the Office Mobile Android Team (E+D org) and contributing to improvements in the Microsoft 365 App which is a one stop solution for all file types(word, excel, ppt, pdf, image, etc.)
- Gained knowledge about android application architecture, activity lifecycle and importance of threading to make optimized apps
- Developed debugging skills and resolved bugs to provide better user experience
- Owner of First Run Experience Screens shown on fresh install
- Worked on capturing feedback (including diagnostics/logs) within the app aiding all developers in efficient issue resolution
- Worked on performance analysis of the app and solved major regressions seen in production (user) data.
- Acquired knowledge about app crash management and also learnt how feature rollouts are performed using Feature Gates

Microsoft | *Software Engineering Intern* *May 2022 - July 2022 | Bangalore, India*

- Worked in the "MCIGET Energy" team which is a child team of "Cloud & Artificial Intelligence". The "MCIGET Energy" team works on understanding the problems and opportunities in the Oil & Gas industry and providing necessary solutions (PaaS such as "Project Oak Forest")
- Gained information and knowledge about the scale and the importance of data in the Oil & Gas industry
- Explored a lot of Azure Products such as Project Oak Forest(ongoing), Azure Purview, Data Factory, Storage Account, ADLS, etc.
- Worked on making a connector which can connect the ongoing "Project Oak Forest" account to a "Azure Purview" account so that the functionalities and features of Purview can be leveraged in project Oak also
- Explored different approaches for the connector and successfully made them using Python
- Contributed actively in the critical decision making meetings which focused on the design of the connector

ACHIEVEMENTS

- Achieved **India Rank 182 (Global Rank 398)** in Round B and **India Rank 255 (Global Rank 467)** in Round C of Google Kickstart 2021
- ACM ICPC 2022-23 Regionalist: **Ranked 46** in Amritapuri Regionals, **Ranked 78 (1st in college)** in Amritapuri Preliminary Round
- ACM ICPC 2021-22 Regionalist: **Ranked 29 (1st in college), Ranked 14 in Kanpur Region** in Preliminary Round
- ACM ICPC 2020-21 Regionalist: **Ranked 55 (1st in college)** in Gwalior-Pune Regionals, **Ranked 122** in Amritapuri Preliminary Round
- Codeforces [handle: Ganesh_aggarwal]: **99.41 percentile** in India, **Max Rating 2025 (Candidate Master)**, with active participation
- CodeChef [handle: ganesh_1085]: **99.92 percentile** in India, **Max Rating 2285 (6*)**, with active participation
- Achieved **Global Rank 91 (99.39 percentile)** in Round #736, **Global Rank 149 (98.23 percentile)** in Round #681 (Div. 2) in Codeforces
- Achieved **India Rank 6 (Global Rank 33)** in Oct. Cookoff 2020, **India Rank 20 (Global Rank 41)** in May Lunchtime 2021 in CodeChef
- Secured **All India Rank 1852** in JEE Advanced 2019 among 230k shortlisted candidates
- Secured **All India Rank 2319** in JEE Mains 2019(**100 percentile in Chemistry**) among 1.2 million candidates

PROJECTS

Purchase Management Portal *(Course Group Project - CP301)* **[Github]**

- Tech Stack: React, Node.js, Fluent UI and Chakra UI and RDMS: PostgreSQL
- Firebase and jsPDF APIs are used and Nginx, PM2 and Azure are used for deployment
- Made a Web App to digitize the work of the purchase section of our college. Our work was highly appreciated by the invoked stakeholders and is anticipated to replace the existing paper-based system to a great extent in the future
- Forms identical to the existing hardcopy forms are generated and proper hierarchy of approvals/rejections is followed

RISC-V ISA Simulator *(Course Group Project - CS204)* **[Github]**

- Made a python based RISC-V ISA simulator and made a GUI for the same using PyQt5
- Implemented both 5 stage pipelined and unpipelined models, Data stalling, Data forwarding etc. for Data and Control Hazards
- Implemented cache memory and used LRU Replacement policy for reading, and Write Through and No Write Allocate policies for writing

Algorithm Visualiser *(Group Project)* **[Github]**

- Made a Web App in Angular which helps the user visualise many important sorting, searching and path finding algorithms
- Visualized sorting/searching algorithms (e.g., Heap sort, Merge sort, Binary search) with customizable animation speed/array size, and pathfinding algorithms (DFS, BFS, A*, Dijkstra) alongside maze generation techniques (Recursive, Prim's).

RELEVANT COURSEWORK

Computer Science - Data Structures and Algorithms, Operating Systems, Computer Networks, Database Management, Computer Architecture, Discrete Mathematics, Digital Logic Design, Programming Paradigms and Pragmatics, Introduction to Programming

Mathematics - Probability and Statistics, Differential Equations, Calculus, Linear Algebra

SKILLS

Programming - Java, Kotlin, C/C++, Python, RISC-V

Web - React, Angular, HTML, CSS, JavaScript/Typescript (preliminary)