Karan Gupta

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EDUCATION

Indraprastha Institute of Information Technology   New Delhi
BTech in Computer Science and Applied Mathematics   2021-2025

- Cumulative GPA: 8.6/10 (till 4th Semester)
- 10/10 GPA in Design and Analysis of Algorithms, Object-oriented Programming, Operating Systems, Introduction to Programming,
- Other Courses: Discrete Structures, Database Management Systems, Theory of Computation

The Indian School   New Delhi
Class 12 (CBSE) | 98.25% School Topper   2021

WORK EXPERIENCE

Research Intern   May,23 – July,23
Guide: Prof Vivek Kumar (IIIT-Delhi)

- Accomplished project enhancing Linux's migrate_pages system call, optimising transfer efficiency by 50% in multi-NUMA node system. During process runtime, the system-call migrates pages from one NUMA node to another. Developed multi-threaded daemon for automated batch page migration of pages of the target process.
- Tools and Technologies: Linux, C, Libnuma library, multi-threading, bash scripting.

RECENT PROJECTS

KSHEER (MySQL, Python, Django, HTML, CSS, JavaScript)[Link]   Feb,23 – May,23
                                                                                    Team size-2

- Designed a web-based database management system for a dairy company covering all the facilities from procuring raw materials to billing customers.
- The web application provides an interface for manufacturers, sellers, and farming unions.
  Used MySQL database and Django for the application.

TANK STARS GAME (Java, LibGDX, Box2D) [Link]   Oct 22 – Dec 22
                                                                     Team size-2

- Event-driven 2D multiplayer game, focusing on Objected-Oriented Programming, in which the players engage in head-to-head tank battles over different terrains and use strategies to outsmart the opponent. Implemented dynamic controls, captivating sound effects, and seamless UI/UX.

LINUX SHELL (C, Linux) [Link]   Oct 22 – Nov 22
                                                      Team size-1

- Made a custom bash-shell with a custom implementation of some of the commands in the default kernel. Used multithreading and multi-processing for developing the commands.

GMAIL NOTION API (Python, Gmail API, Notion) [Link]   April 22 – April 22
                                                                            Team size-3

- Developed a Python application that uses Gmail API to segregate emails by search or by sender in the note-making application Notion and also send bulk mail. Notion keeps track of all the important emails.

ACHIEVEMENTS

- International Quant Championship 2023- world rank 163 round 1, world rank 210 round, Gold Level Participant
- Google Hashcode 2022 Rank – 4480
- 3 star at Codechef (1717)
- JEE Advanced(2022) Rank – 4302

SKILLS

Programming: Python • C • C++ • Java • Flutter• HTML/CSS • JavaScript • SQL
Miscellaneous: Django • AWS • Bash Shell • Firebase• Git • Arduino • Linux • Figma • LibGDx • Alpha creation

EXTRACURRICULAR

- Member of 65th Square-Chess Society of IIITD (PR and Publicity Team).
- Operations Team Member, Odyssey (Cultural Fest of IIITD) 2023
- Organising Team member of Chess Tournament in Esya (Technical Fest of IIITD) 2023